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OF

HYMENOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

by Frederick Smith

PART II.

APIDÆ.

LONDON:
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PREFACE.

This Part contains the completion of the list of species belonging to the Family Apidæ, at the same time indicating those at present contained in the Collection of the British Museum.

It has been prepared by Mr. Frederick Smith, who has taken every care in the determination of the species, the references to the synonyma, and in the descriptions of such species as hitherto are apparently undescribed.

The remaining Families will follow as soon as they can be completed.

JOHN EDWARD GRAY.

October 1854.

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CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe 4. ANTHOPHILA.

Fam. 2. APIDÆ.

Subfam. 2. DASYGASTRÆ.

Genus 14. ANTHIDIUM.

Apis, pt., *Linn. Syst. Nat.* i. 953, 1766.
Anthidium, *Fabr. Syst. Piez.* p. 364, 1804.
Megachile, pt., *Latr. Hist. Nat.* xiv. 51, 1805.
Trachusa, pt., *Jurine, Hym.* p. 252, 1809.

1. ANTHIDIUM MANICATUM. B.M.

Apis manicata, *Linn. Faun. Suec.* 1701; *Syst. Nat.* i. 958. 28, ♂.
Fabr. Syst. Ent. 384. 35; *Ent. Syst.* ii. 330. 73.
Schäff. Icon. Ins. t. 32. f. 11, 12.
Rossi, Faun. Etrus. ii. 103. no. 914.
Christ. Hym. p. 133. t. 9. f. 5.
Kirby, Mon. Ap. Angl. ii. 248. 47. t. 16. f. 12 ♀, 13 ♂.
Don. Brit. Ins. xiv. 57. t. 489.
Apicis dentata ♂, pervigil ♀, *Harris, Expos.* p. 161. t. 49. f. 1 ♂, 2 ♀.

Anthidium manicatum, *Fabr. Syst. Piez.* p. 364. 1.
Curtis, Brit. Ent. iv. *Hym.* t. 61.
Latr. Ann. Mus. Hist. Nat. xiii. 212. 5.
St. Farg. Hym. ii. 355. 4.
Smith, Zool. iv. 1452. 1.
Nyland. Ap. Boreal. p. 265. 22.
Apis maculata, *Fabr. Ent. Syst.* ii. 332. 77, var. ♀.
Panz. Faun. Germ. 7. 14.

Hab. Britain; France; Italy; Switzerland; Germany; Denmark; Sweden; Finland.

2. ANTHIDIUM DIADEMA. B.M.

Anthidium diadema, *Latr. Ann. Mus. Hist. Nat.* xiii. 223. 14.
St. Farg. Hym. ii. 363. 10.

Hab. France; Algeria.

3. ANTHIDIUM FLORENTINUM.

Apis florentina, *Fabr. Ent. Syst.* ii. 331. 74.
Oliv. Ency. Méth. iv. 73.
Anthidium florentinum, *Fabr. Syst. Piez.* 366. 3.
Panz. Faun. Germ. 105. 20.
Latr. Ann. Mus. Hist. Nat. xiii. 211. 4.
St. Farg. Hym. ii. 359. 7. p. 13. f. 4, 5.
Megachile florentinum, *Latr. Hist. Nat. Crust. Ins.* xiv. 55.
Anthophora florentina, *Illig. Mag.* p. 117.
Trachusa florentina, *Jurine, Hym.* p. 253.

Hab. France; Italy; Germany; Albania.

4. ANTHIDIUM ANNULATUM.

Anthidium annulatum, *St. Farg. Hym.* ii. 388.

Hab. France (Forest of St. Germain).

5. ANTHIDIUM CONTRACTUM.

Anthidium contractum, *Latr. Ann. Mus. Hist. Nat.* xiii. 229. 22.
St. Farg. Hym. ii. 375. 21.

Hab. France; Dalmatia; Africa.

6. ANTHIDIUM CINGULATUM.

Anthidium cingulatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 219. 10. pl. 1. f. 4.
St. Farg. Hym. ii. 378. 21.
Lucas, Expl. Sc. Algér. iii. 201. 129.

Hab. France; Montpellier; Barbary; Algeria.

7. Anthidium flavilabre.

Anthidium flavilabre, *Latr. Ann. Mus. Hist. Nat.* xiii. 222. 13.
St. Farg. Hym. 372. 18.

Hab. France.

8. Anthidium fuscipenne.

Anthidium fuscipenne, *St. Farg. Hym.* ii. 369. 15 ♂.

Hab. France.

9. Anthidium fasciatum.

Anthidium fasciatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 220. 11.
St. Farg. Hym. ii. 382. 29.

Hab. France; Dalmatia; Spain.

10. Anthidium lituratum. B.M.

Apis lituratа, *Panz. Faun. Germ.* 80. 21.
Anthidium lituratum, *Jurine, Hym.* p. 250.
Latr. Ann. Mus. Hist. Nat. xiii. 226. 18.
St. Farg. Hym. ii. 371. 17.
Megachile florentina (minor), *Spin. Ins. Lig.* fasc. 1. 138.
Trachusa lituratа, *Jurine, Hym.* p. 253.
Anthophora lituratа, *Illig. Mag.* (1806) p. 118 ♀.

Hab. France; Germany; Albania.

11. Anthidium luteipes.

Anthidium luteipes, *St. Farg. Hym.* ii. 368. 14 ♂.

Hab. France.

12. Anthidium nasutum.

Anthidium nasutum, *Latr. Ann. Mus. Hist. Nat.* xiii. 233. 25.

Hab. France.

13. Anthidium oblongatum.

Megachile interrupta, *Latr. Hist. Nat. Crust. Ins.* xiv. 56.
Spin. Ins. Lig. fasc. 1. p. 137.
Apis manicata, *Panz. Faun. Germ.* 55. 10 ♂.
Anthidium oblongatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 216. 7.
St. Farg. Hym. ii. 391. 37.

Hab. France; Switzerland.

14. Anthidium punctatum.

Anthidium punctatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 217. 8.
St. Farg. Hym. ii. 364. 11.

Hab. France.

15. Anthidium parvulum. B.M.

Anthidium parvulum, *Fabr. Hym.* ii. 403. 50.

Hab. France.

16. Anthidium Provenciale.

Anthidium Provenciale, *St. Farg. Hym.* ii. 395. 40.

Hab. Provence; Spain.

17. Anthidium quadridentatum.

Anthidium quadridentatum, *St. Farg. Hym.* ii. 402. 49.

Hab. France.

18. Anthidium strigatum.

Trachusa strigata, *Panz. Faun. Germ.* 14. 14.
Jurine, Hym. 253.
Anthidium strigatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 228. 21.
St. Farg. Hym. ii. 373. 19.

Hab. France; Germany.

19. Anthidium sticticum. B.M.

Apis stictica, *Fabr. Ent. Syst.* ii. 331. 76.
Oliv. Ency. Méth. iv. 70.
Dumér. Dict. Sc. Nat. i. 144.
Anthidium sticticum, *Fabr. Syst. Piez.* 366. 5.
Latr. Ann. Mus. Hist. Nat. xiii. 208. 1. pl. 1. f. 1.
St. Farg. Hym. ii. 352. 2.
Lucas, Explo. Sc. Algér. iii. 197. 125.
Trachusa stictica, *Jurine, Hym.* p. 253.

Hab. France; Italy; Algeria.

20. Anthidium septemdentatum. B.M.

Megachile florentina, *Spin. Ins. Lig.* fasc. 1. 137.
Anthidium septemdentatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 210. 3.
St. Farg. Hym. ii. 353. 3.

Hab. France; Italy.

21. Anthidium septemspinosum.

Anthidium septemspinosum, *St. Farg. Hym.* ii. 359. 6 ♂.

Hab. France.

22. Anthidium nigriceps. B.M.

Female. Length 4½ lines.—Black, the vertex has a yellow dot on each side behind the eyes, and as well as the disk of the thorax has a dusky ferruginous pubescence; the cheeks, thorax beneath and its sides, as well as the metathorax, covered with griseous pubescence; that on the face and the tarsi is of a pale glittering yellowish-white; on the tarsi beneath it is fusco-ferruginous; wings subhyaline, faintly clouded at their apical margins, also a fuscous streak in a line with the stigma across the marginal cell. Abdomen, a small lunate spot on each side of the basal segment, a lateral oblong stripe on the second broadest within, and the three following have on each side an ovate macula; the apical segment notched laterally, and its margin crenulated.

Hab. Polish Ukraine.

23. Anthidium tæniatum.

Anthidium tæniatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 220. 12.

Hab. Spain.

24. Anthidium sinuatum.

Anthidium sinuatum, *St. Farg. Hym.* ii. 374. 20.

Hab. Spain.

25. Anthidium scutellare.

Anthidium scutellare, *Latr. Ann. Mus. Hist. Nat.* 215. 6.
St. Farg. Hym. ii. 389. 35.

Hab. Spain.

26. Anthidium rubiginosum.

Anthidium rubiginosum, *St. Farg. Hym.* ii. 396. 41.

Hab. Spain; Arabia.

27. Anthidium Latreillii.

Anthidium Latreillii, *St. Farg. Hym.* ii. 393. 39.

Hab. Spain.

28. Anthidium ferrugineum.

Apis ferruginea, *Oliv. Ency. Méth.* iv. 74, 75 ♀.
Anthidium ferrugineum, *Fabr. Syst. Piez.* p. 367. 11.
Latr. Ann. Mus. Hist. Nat. xiii. 224. 15.
Spin. Ann. Soc. Ent. Fr. vii. 521. 67.

Hab. Spain; Arabia.

29. Anthidium Dufourii.

Anthidium Dufourii, *St. Farg. Hym.* ii. 380. 26.

Hab. Spain.

30. Anthidium coronatum.

Female. Length 4 lines.—Black, the clypeus, inner orbits of the eyes nearly reaching their vertex, a spot in front of the anterior stemma, the mandibles and outer orbits of the eyes yellow, the latter broadly so towards the vertex; the three basal joints of the flagellum and apex of the scape ferruginous. Thorax, the margin of the scutellum, the tegulæ, a line in front, the collar, sometimes interrupted, the tubercles and a spot beneath them yellow; the disk sometimes encircled with yellow; the legs yellow; the coxæ, trochanters and base of the femora beneath fusco-ferruginous, the two former have their tips ferruginous. Abdomen, a transverse yellow band at the basal margin of each segment, the first interrupted and acuminate, the second very slightly interrupted, the three following slightly emarginate on their inferior margin, the sixth segment entirely yellow; beneath densely clothed with golden-yellow pubescence.

Hab. Albania. (In the Coll. of W. W. Saunders, Esq.)

31. Anthidium cimbiciforme. B.M.

Female. Length 7 lines.—Head yellow, the anterior margin of the clypeus crenulated, the crenulation, labrum and teeth of the mandibles black, the latter has its margins stained with ferruginous; the front has an oblong black patch extending from the base of the clypeus a little beyond the posterior stemmata, in front of the anterior stemma is a small circular spot and a triangular one above the clypeus yellow; the black patch gradually narrows from the insertion of the antennæ to the stemmata, where it again becomes wider, enclosing them; antennæ ferruginous, darkest towards their apex, the scape yellow. Thorax yellow, having a broad black line down the centre, extending to the scutellum, from which on each side a narrower line passes forwards, terminating opposite the tegulæ, which are also yellow

and have a ferruginous spot in the middle; the margin of the scutellum broadly yellow and quadrilobate; the metathorax and breast black, legs yellow, the tibiæ having an oblong black stain beneath; the femora are also more or less black in front, the apical joints of the tarsi ferruginous; wings fusco-hyaline, darkest towards their anterior margins. Abdomen, each segment has a very broad yellow band, the first and second interrupted, the third, fourth and fifth notched above; beneath densely clothed with yellow pubescence.

Male.—Closely resembling the female, but the disk of the thorax is sometimes entirely black, the margins only being bordered with yellow; or having indistinct yellow or ferruginous lines, that portion of the abdomen which is black in the female is more or less ferruginous in the male; the apical segment has a single stout spine in the centre, rounded at its apex and bright ferruginous.

Hab. Albania.

32. ANTHIDIUM BINOMINATUM.

Anthidium rufiventre, *Brullé, Expéd. Sc. Morée*, iii. 339. 752. pl. 48. f. 7 (not of *Latr.*).

Hab. Morea.

33. ANTHIDIUM SULPHUREUM.

Anthidium sulphureum, *St. Farg. Hym.* ii. 367. 13 ♂.

Hab. Sicily.

34. ANTHIDIUM LATERALE.

Anthidium laterale, *Latr. Ann. Mus. Hist. Nat.* xiii. 209. 2 ♀. t. 1. f. 2.
St. Farg. Hym. ii. 400. 45.

Hab. Barbary.

35. ANTHIDIUM FLAVUM.

Anthidium flavum, *Latr. Ann. Mus. Hist. Nat.* xiii. 225. 17. pl. 1. f. 6.
St. Farg. Hym. ii. 397. 42.

Hab. Barbary.

36. ANTHIDIUM SUBSPINOSUM.

Anthidium subspinosum, *Klug, Symb. Phys.* Dec. iii. no. 2. t. 28. f. 2.

Hab. Syria.

37. Anthidium melanurum.
Anthidium melanurum, *Klug, Symb. Phys.* Dec. iii. no. 3. t. 28. f. 3.
Hab. Syria.

38. Anthidium aculeatum.
Anthidium aculeatum, *Klug, Symb. Phys.* Dec. iii. no. 1. t. 28. f. 1.
Hab. Syria.

39. Anthidium auritum.
Anthidium auritum, *Klug, Symb. Phys.* Dec. iii. no. 9. t. 28. f. 9.
Hab. Nubia (Saccahram).

40. Anthidium alternans.
Anthidium alternans, *Klug, Symb. Phys.* Dec. iii. no. 10. t. 28. f. 10.
Hab. Nubia (Saccahram).

41. Anthidium cinctum.
Anthidium cinctum, *Klug, Symb. Phys.* Dec. iii. no. 8. t. 28. f. 8.
Hab. Nubia (Amboukohl).

42. Anthidium pulchellum.
Anthidium pulchellum, *Klug, Symb. Phys.* Dec. iii. no. 11. t. 28. f. 11.
Spin. Ann. Soc. Ent. Fr. vii. 526. 68.
Hab. Nubia (Saccahram).

43. Anthidium thoracicum.
Anthidium thoracicum, *Klug, Symb. Phys.* Dec. iii. no. 7. t. 28. f. 7.
Hab. Nubia (Saccahram).

44. Anthidium Waltlii.
Anthidium Waltlii, *Spin. Ann. Soc. Ent. Fr.* vii. 520. 66.
Hab. Egypt.

45. Anthidium Fischeri.
Anthidium Fischeri, *Spin. Ann. Soc. Ent. Fr.* vii. 519. 65.
Hab. Egypt.

46. Anthidium Grohmanni.
Anthidium Grohmanni, *Spin. Ann. Soc. Ent. Fr.* vii. 524.
Hab. Egypt.

47. Anthidium Siculum.

Anthidium Siculum, *Spin. Ann. Soc. Ent. Fr.* vii. 525. 17.

Hab. Egypt.

48. Anthidium xanthopygum.

Anthidium xanthopygum, *Klug, Symb. Phys.* Dec. iii. no. 13. t. 28. f. 13.

Hab. Arabia Felix.

49. Anthidium tessellatum.

Anthidium tessellatum, *Klug, Symb. Phys.* Dec. iii. no. 4. t. 28. f. 4.

Hab. Arabia Felix.

50. Anthidium helvolum.

Anthidium helvolum, *Klug, Symb. Phys.* Dec. iii. no. 5. t. 28. f. 5.

Hab. Arabia Felix.

51. Anthidium posticum.

Anthidium posticum, *Klug, Symb. Phys.* Dec. iii. no. 12. t. 28. f. 12.

Hab. Arabia Felix.

52. Anthidium albiventre.

Anthidium albiventre, *St. Farg. Hym.* ii. 366. 12.

Hab. Algeria?

53. Anthidium afrum.

Anthidium afrum, *St. Farg. Hym.* ii. 387. 33.
Lucas, Explo. Sc. Algér. iii. 203. 132. pl. 8. f. 9.

Hab. Algeria.

54. Anthidium barbarum.

Anthidium barbarum, *St. Farg. Hym.* ii. 357. 5 ♂.
Lucas, Explo. Sc. Algér. iii. 199. 126. pl. 8. f. 6.

Hab. Algeria.

55. Anthidium bellicosum.

Anthidium bellicosum, *St. Farg. Hym.* ii. 385. 32.
Lucas, Explo. Sc. Algér. iii. 202. pl. 8. f. 10.

Hab. Algeria.

56. Anthidium comptum.

Anthidium comptum, *St. Farg. Hym.* ii. 398. 44.
Lucas, Explo. Sc. Algér. iii. 205. 136. pl. 9. f. 3.

Hab. Algeria.

57. Anthidium discoidale.

Anthidium discoidale, *Latr. Ann. Mus. Hist. Nat.* xiii. 225. 16. pl. 1. f. 5.
St. Farg. Hym. ii. 397. 43.
Lucas, Explo. Sc. Algér. iii. 205. 135.
Anthidium ferrugineum, *Spin. Ann. Soc. Ent. Fr.* vii. 523. var. E.

Hab. Algeria.

58. Anthidium frontale.

Anthidium frontale, *St. Farg. Hym.* ii. 377. 22.
Lucas, Explo. Sc. Algér. iii. 201. 128. pl. 8. f. 8.

Hab. Algeria.

59. Anthidium Fontainesii. B.M.

Anthidium Fontainesii, *St. Farg. Hym.* ii. 350. 1.
Lucas, Explo. Sc. Algér. iii. 196. 124. pl. 8. f. 4.

Hab. Algeria.

60. Anthidium Klugii.

Anthidium Klugii, *Lucas, Explo. Sc. Algér.* iii. pl. 9. f. 2.

Hab. Algeria.

61. Anthidium Numida.

Anthidium Numida, *St. Farg. Hym.* ii. 392. 38.
Lucas, Explo. Sc. Algér. 203. 133. pl. 9. f. 1.

Hab. Algeria.

62. Anthidium ornatum.

Anthidium ornatum, *St. Farg. Hym.* ii. 381. 29.
Lucas, Explo. Sc. Algér. iii. 201. 130.

Hab. Algeria.

63. Anthidium Oraniense.

Anthidium Oraniense, *St. Farg. Hym.* ii. 361. 8.
Lucas, Explo. Sc. Algér. iii. 200. 127. pl. 8. f. 5.

Hab. Algeria.

64. ANTHIDIUM SCAPULARE.

Anthidium scapulare, *Latr. Ann. Mus. H. N.* xiii. 227. 19. pl. 1. f. 8. *St. Farg. Hym.* ii. 379. 25.

Hab. Algeria.

65. ANTHIDIUM ABDOMINALE. B.M.

Thynnus abdominalis, *Fabr. Ent. Syst.* ii. 245. 3; *Syst. Piez.* p. 231. 3.

Hab. Port Natal.

66. ANTHIDIUM AFRICANUM. B.M.

Male. Length 5 lines.—Black, the clypeus and a triangular spot above, the sides of the face and a slender line along the inner orbits of the eyes above the insertion of the antennæ, not reaching their vertex, a short narrow stripe in front of the anterior stemma, and the mandibles exteriorly yellow. Thorax, a minute spot in front on the tegulæ, and the margin of the scutellum, narrowly, yellow; the latter very broad and produced half-way over the basal segment of the abdomen; the wings dark fuscous and having a purple tinge; the legs and abdomen ferruginous, the latter armed at the apex with three teeth, the central tooth stout and rounded at the apex, the lateral ones curved inwards and acute.

Hab. Sierra Leone. (The Rev. D. Morgan.)

This species is very probably the male of *A. bicolor*; the insect which I have considered to be St. Fargeau's species merely differs slightly in the coloration of the clypeus.

67. ANTHIDIUM CORDATUM. B.M.

Female. Length 3½ lines.—Black, strongly and closely punctured; a minute spot on the front a little below the anterior stemma; a narrow line down the inner margin of the eyes, a similar one on the margin of the vertex, the clypeus and face on each side as high as the insertion of the antennæ, and a spot at the base of the mandibles yellow. Thorax, a spot on the tubercles, another on the tegulæ, an epaulet over the tegulæ, a spot at each of the lateral angles of the scutellum and the legs yellow; the legs roughly punctured; the wings fusco-hyaline, their apical margins darkest. Abdomen cordate, the sides fulvo-testaceous, each segment having an elongate ovate yellow macula, the sixth segment entirely fulvo-testaceous, and having on each side a yellow macula; beneath fulvo-testaceous, the basal margins of the segments fuscous.

Hab. Port Natal.

68. Anthidium immaculatum.

Female. Length 3½ lines.—Black, the face, cheeks, thorax on the sides and beneath densely clothed with griseous pubescence, on the vertex and disk of the thorax it is pale fulvous; the legs have also a thin griseous-white pubescence; the anterior and intermediate tarsi and the posterior pair beneath covered with bright fulvous pubescence, the claw-joints ferruginous. The abdomen above has a thin erect scattered pale yellow pubescence, becoming white towards the lateral margins; beneath, it is white at the sides and fulvous in the middle, the margins of all the segments narrowly testaceous.

Hab. The Cape of Good Hope. (In the Coll. of W. W. Saunders, Esq.)

69. Anthidium bicolor.

Anthidium bicolor, *St. Farg. Hym.* ii. 399. 45.

Hab. The Gambia.

70. Anthidium reversum.

Female. Length 3 lines.—Black, the clypeus, inner orbits of the eyes as high as the insertion of the antennæ, the apex of the scape in front, an uninterrupted line on the margin of the vertex broadest behind the eyes, and the mandibles, yellow; the latter are ferruginous at their apex and armed with four or five stout acute teeth; the flagellum fulvous beneath. Thorax, a broad stripe on each side, the margin of the scutellum subinterrupted in the middle, and the legs yellow; the apical joints of the tarsi and the tegulæ ferruginous; the latter have a yellow spot in front; the femora fusco-ferruginous towards their base, wings subhyaline. Abdomen, the basal segment has on each side an oblong triangular macula, the following segments have a broad yellow band interrupted in the middle; the apical segment has two longitudinal yellow lines.

Hab. The Gambia. (Coll. F. Smith.)

71. Anthidium truncatum.

Female. Length 3 lines.—Black, the clypeus, a spot on each side and the mandibles exteriorly towards their base yellow, their margins and apex black or fusco-ferruginous, armed with four acute stout teeth; the intervals between them denticulate. The tibiæ and tarsi yellow, the former fusco-ferruginous beneath; the wings smoky, darkest at their anterior margins; a minute yellow spot in front of the tegulæ; the posterior margin of the scutellum broadly truncate. Abdomen, a broad oblong-ovate

macula on each segment laterally; the apical segment being entirely yellow, and having a central black dot.

Hab. The Gambia. (Coll. F. Smith.)

72. Anthidium villosulum.

Male. Length 5½ lines.—Black, the face as high as the stemmata and the cheeks densely covered with short pale yellow pubescence, the anterior margin of the clypeus fringed with the same, on the clypeus it is very sparing; the scape of the antennæ in front, the clypeus, sides of the face adjoining, a minute spot above the eyes and the mandibles yellow, the latter armed with three stout black teeth at their apex. The thorax on the sides and beneath, the tibiæ behind and all the tarsi above densely clothed with yellowish-white pubescence; the femora beneath, and the tarsi ferruginous; the anterior and intermediate tibiæ above and the posterior pair at the base yellow, the whole having a short scattered glittering pubescence; the disk of the thorax covered with short ochraceous pubescence, the scutellum rounded behind and slightly emarginate in the middle; a minute spot on each side of the collar, and a very narrow line on the posterior margin of the scutellum, yellow; the wings subhyaline, their nervures black, except towards the insertion of the wings, where they, as well as the tegulæ, are rufo-testaceous, the latter yellow at their anterior margins. The abdomen has four rows of small ovate yellow spots, the two outer rows touching the lateral margins; the sixth segment has only two central spots, from which an oblique line passes off to the lateral margins; the fifth and sixth segments are armed at their margins with a curved spine, the first pair yellow; the apical segment has two stout curved black spines; beneath, the apex ferruginous, and the lateral margins having a dense fringe of pale pubescence.

Hab. Africa. (The Gambia.)

73. Anthidium coloratum.

Female. Length 3½ lines.—Black, the face and cheeks clothed with long white pubescence, the vertex with fulvous; antennæ, legs and tegulæ pale ferruginous; a small white spot on the vertex behind the eyes. The thorax beneath and metathorax covered with white pubescence, on the disk with fulvous; the wings slightly ferruginous towards their base. Abdomen, the basal margins of the segments have on each side an elongate white stripe emarginate posteriorly, the stripes on the fifth segment almost uniting; the sixth segment has on each side a minute tooth; the ventral scopa golden-yellow.

Male. 3½ lines.—Very closely resembling the female, differing

only in having the clypeus and sides of the face white, in being more densely hairy, and in having the apical segment armed with three short teeth.

Hab. Chili.

74. Anthidium bilineolatum.

Anthidium bilineolatum, *Spin. Ann. Soc. Ent. Fr.* x. 141. 91 (1841).

Hab. Cayenne.

75. Anthidium costatum.

Anthidium costatum, *Spin. Ann. Soc. Ent. Fr.* x. 140. 90 (1841).

Hab. Cayenne.

76. Anthidium divaricatum.

Male. Length 4 lines.—Black, closely punctured; a narrow line traverses the outer orbits of the eyes, and passes along the margin of the vertex; a stripe along the inner orbits of the eyes, a short line at the insertion of each antenna, and the clypeus anteriorly, of a reddish-yellow; at the base of the clypeus are two black dentate spots; the mandibles reddish-yellow. Thorax, a narrow yellow line encircles the disk of the thorax, slightly interrupted on the collar and on the posterior margin of the scutellum; the tegulæ rufo-testaceous, the wings fuscous, palest at their base; the hinder margin of the tubercles and a short line on the breast reddish-yellow; the tibiæ and tarsi ferruginous and having a fuscous stain behind, the apex of the femora more or less ferruginous; the tarsi pubescent, having a fringe of pale hairs behind; a short yellow line on each side of the three basal segments, the fourth having a narrow interrupted line across the middle, the fifth an uninterrupted one, and the sixth entirely yellow, except its apical margin, the seventh yellow at the sides. its margin rounded and entire.

Hab. South America. (Coll. W. W. Saunders, Esq.)

77. Anthidium flavo-pictum. B.M.

Male. Length $3\frac{1}{2}$ lines.—Flavo-testaceous, a narrow fuscous line behind the eyes; the region of the ocelli fuscous, terminating posteriorly in a line with the vertex of the eyes; the fuscous stain forms a quadrate shape before the ocelli, passing downwards to the insertion of the antennæ, its inferior margin angulated in the centre; the scape yellow in front, the flagellum ferruginous beyond the third joint, black above. Thorax, the disk black, strongly punc-

tured, encircled by a reddish-yellow border, subinterrupted anteriorly; the tegulæ fulvous, the wings fuscous along their anterior margin, paler posteriorly, the nervures black; legs fulvo-ferruginous, variegated with yellow, the tarsi yellow above. Abdomen fulvo-ferruginous, each segment having a yellow fascia in the middle, the apical segment quadrate, deeply notched in the middle, the notch rounded: beneath, the basal margins of the segments narrowly fuscous, the segments having a yellow fascia; the entire abdomen coarsely punctured.

Hab. Brazil (Santarem).

78. Anthidium guttatum. B.M.

Anthidium guttatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 227. 20. *St. Farg. Hym.* ii. 382. 28.

Hab. Brazil.

79. Anthidium lineolatum.

Anthidium lineolatum, *St. Farg. Hym.* ii. 390. 36.

Hab. Brazil.

80. Anthidium steloides.

Anthidium steloides, *Spin. Faun. Chili*, vi. 182. 3.

Female. Length 4 lines.—Slightly pubescent; antennæ ferruginous, the apex fuscous; head and thorax black, maculated; the abdomen clothed beneath with black pubescence.

Hab. Chili.

81. Anthidium Chilense.

Anthidium chilense, *Spin. Faun. Chili*, vi. 181. 2.

Female. Length 4 lines.—Black, pubescent; antennæ, legs and tegulæ fulvous; thorax black, maculated; the venter clothed with white pubescence; abdomen above shining black, variegated with yellow markings.

Hab. ——?

82. Anthidium Gayi.

Anthidium Gayi, *Spin. Faun. Chili*, vi. 180. 1.

Female. Length 5 lines.—Antennæ, legs and tegulæ reddish-yellow; the two apical joints of the antennæ fuscous; head and thorax black, immaculate; the abdomen clothed beneath with black pubescence; the abdomen variegated with yellow markings.

Hab. Chili.

83. Anthidium maculifrons. B.M.

Female. Length 4 lines.—Black, the face has four ovate yellow maculæ, two on the clypeus, and one on each side of it; a stripe on the inferior margin of the mandibles, and a minute spot on the vertex above the eyes, yellow. Thorax, a short stripe over the tegulæ, and four on the margin of the scutellum; a spot on the tegulæ anteriorly, and the tibiæ at their base above, more or less yellow; the thorax, particularly beneath, the face, cheeks and legs have a cinereous pubescence, on the tarsi beneath it is rufo-fuscous; the claws ferruginous. The basal segment of the abdomen has on each side an angular macula and another minute one a little within; the four following segments have on each side, a little within their apical margins, an oblong stripe, pointed within, and deeply emarginate anteriorly, almost dividing the stripes; the apical segment has two central ovate spots, its margin crenulated, and laterally subemarginate, terminating in a short tooth; the ventral scopa yellowish-white.

Hab. United States.

84. Anthidium jugatorium.

Megachile jugatoria, *Say, Long's Exped. Source St. Peter's River, Append.* p. 83. 3.

Hab. North America (Missouri).

85. Anthidium interruptum.

Megachile interrupta, *Say, Long's Exped. Source St. Peter's River, Append.* 82. 1.

Hab. North America (Missouri).

86. Anthidium emarginatum.

Megachile emarginata, *Say, Long's Exped. Source St. Peter's River, Append.* p. 83. 2.

Hab. North America (Missouri).

87. Anthidium notatum. B.M.

Anthidium notatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 231. 23 ♂. *St. Farg. Hym.* ii. 370. 16.

Hab. North America (Carolina).

88. Anthidium perplexum. B.M.

Female. Length 4 lines.—Black, the face on each side of the clypeus and a little above the insertion of the antennæ yellow;

an uninterrupted line along the margin of the vertex, an ovate spot a little below the insertion of the antennæ, the scape and four or five basal joints of the flagellum ferruginous. Thorax, the margin ferruginous, interrupted only on the collar and on the posterior margin of the scutellum; the nervures towards the base of the wings, the tubercles and legs ferruginous; the wings dark fuscous. The basal segment of the abdomen ferruginous, having an ovate yellow macula laterally, its posterior margin narrowly black; the second segment has on each side a curved stripe nearly uniting in the middle, the stripes are tinged with ferruginous, the two following segments have on each side a subquadrate macula similarly coloured, the two apical segments black; the ventral scopa yellowish white.

Male.—This sex closely resembles the female, but differs in having the clypeus yellow as well as a spot above and the mandibles also yellow exteriorly. The abdomen has two additional spots on the fifth segment, and all the spots are emarginate at their outer margins, the sixth segment is sub-bituberculate on its apical margin, the seventh is somewhat produced and rounded, and has a slight central carina, its apical margin as well as the extreme lateral margins of all the segments yellow.

Hab. Georgia.

89. Anthidium curvatum. B.M.

Female. Length 4 lines.—Black, the clypeus yellow, having a broad black stripe down the middle, the inner orbits of the eyes nearly to their vertex broadly yellow, a minute yellow spot before the anterior stemma and a transverse yellow line on the vertex continued nearly half-way down the outer margins of the eyes. The collar, tubercles and posterior margin of the scutellum yellow, the former slightly interrupted; the tubercles and legs yellow, the latter varied with ferruginous, the femora being fusco-ferruginous towards their base; the wings smoky, darkest towards their anterior margin. The basal segment of the abdomen has a transverse band, deeply emarginate laterally, the three following segments have on each side an oblong stripe curved downwards and pointed at their extremity within; the curved form being given by a deep notch in the middle of each stripe beneath; the fifth segment has two central oblique stripes, the sixth immaculate.

Hab. Georgia.

90. Anthidium dorsale.

Anthidium dorsale, *St. Farg. Hym.* ii. 384. 31.

Hab. North America (Georgia).

91. Anthidium maculatum. B.M.

Male. Length 5 lines.—Black, the entire insect thinly covered with cinereous pubescence; the clypeus, the face on each side, and the mandibles exteriorly of a yellowish-white; also a minute spot on the vertex above the eyes. Thorax, the scutellum has a narrow line on each side of its posterior margin, a spot on the tegulæ in front, and a minute one at the base of the anterior tibiæ above yellow; all the tarsi have a dense white pubescence, and the basal joint of the anterior and posterior pairs is pale yellow. Abdomen, the first to the fifth segment have each four subtriangular yellow spots, the sixth has only two oblique spots, the lateral margins having a curved spine, the seventh is armed with three spines on its apical margin, the central one being the shortest.

Hab. Mexico.

92. Anthidium rufiventre.

Anthidium rufiventre, *Latr. Ann. Mus. Hist. Nat.* xiii. 234. 26.

Hab. ——?

93. Anthidium quadrilobum.

Anthidium quadrilobum, *St. Farg. Hym.* ii. 401. 47.

Hab. ——?

94. Anthidium productum.

Anthidium productum, *St. Farg. Hym.* ii. 400. 46.

Hab. ——?

95. Anthidium obtusatum.

Anthidium obtusatum, *St. Farg. Hym.* ii. 362. 9 ♂.

Hab. ——?

96. Anthidium Lepelletieri.

Anthidium Lepelletieri, *Fons. Ann. Soc. Ent. Fr.* 2 sér. iv. 43. 4.

Hab. ——?

97. Anthidium marginatum.

Anthidium marginatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 218. 9. pl. 1. f. 3.
St. Farg. Hym. ii. 383. 30.

Hab. ——?

98. Anthidium dissectum.

Anthidium dissectum, *Eversm. Bull. Mosc.* xxv. 80. 2.

Hab. Russia.

99. Anthidium regulare.

Anthidium regulare, *Eversm. Bull. Mosc.* xxv. 80. 3.

Hab. Russia.

100. Anthidium nigripes.

Anthidium nigripes, *H. Schäff. Nom. Ent.* p. 70.
Eversm. Bull. Mosc. xxv. 81. 5.

Hab. Russia.

101. Anthidium auripes.

Anthidium auripes, *Eversm. Bull. Mosc.* xxv. 82. 6.

Hab. Russia.

102. Anthidium integrum.

Anthidium integrum, *Eversm. Bull. Mosc.* xxv. 83. 8.

Hab. Russia.

103. Anthidium senile.

Anthidium senile, *Eversm. Bull. Mosc.* xxv. 83. 9.

Hab. Russia.

104. Anthidium floripetum.

Anthidium floripetum, *Eversm. Bull. Mosc.* xxv. 83. 10.

Hab. Russia.

105. Anthidium reptans.

Anthidium reptans, *Eversm. Bull. Mosc.* xxv. 85. 13.

Hab. Russia.

106. Anthidium Sibiricum.

Anthidium sibiricum, *Eversm. Bull. Mosc.* xxv. 85. 14.

Hab. Russia.

Genus 15. SERAPIS, n. g.

Serapis, *F. Smith's MSS.* (Details, Plate IX.)

Head about the width of the thorax, the ocelli placed in a curve on the vertex; the maxillary palpi two-jointed, the basal joint short, much wider than the second, but not more than half the length; the second joint cylindric and furnished at its apex with two stout setæ, which are about two-thirds the length of the joint; labial palpi four-jointed, the two basal joints elongate, the two apical ones minute; the labrum elongate, truncate at the apex. The anterior wings having one marginal and two submarginal cells, the former about the length of the two latter; the first submarginal cell receiving the first recurrent nervure about one-fifth distant from its apex; the second recurrent nervure uniting with the second transverse cubital nervure; the abdomen furnished beneath with a dense scopa.

1. SERAPIS DENTICULATUS. B.M.

Female. Length 5 lines.—Black, the face and cheeks densely covered with white pubescence, on the vertex it is more thinly scattered; the mandibles slightly bent and armed at their apex with a long acute tooth, on the inner margin are four short acute teeth, the basal one stoutest. Thorax, in front, on the sides and beneath, densely clothed with white pubescence; two small tufts of snow-white pubescence on the prothorax, one on the tegulæ posteriorly, and two at the base of the scutellum; the posterior tibiæ at their base and apex are spotted with white pubescence, the scutellum very broad, slightly produced over the base of the abdomen, the thorax on each side of the scutellum produced into an acute angle. Abdomen, the basal segment has on each side a tuft of white pubescence, the four following segments have laterally a short fascia of snow-white pubescence, the sixth having an ovate spot, and in the centre a slightly elevated carina; the apical margin transverse, slightly produced in the middle; all the segments except the basal one produced at its lateral angles into a short stout acute tooth; the scopa beneath dense, fulvous in the middle and white at the sides.

Male.—This sex closely resembles the female, but has the clypeus and mandibles yellow, the latter edentate, acute at their apex; the pubescence on the face and disk of the thorax slightly ochraceous; the outer margin of the tegulæ and scutellum testaceous, the apical margins of the segments of the abdomen rufo-testaceous; the seventh segment armed laterally with an elongate stout acute spine, the spines grooved exteriorly; also a central

spine slender and acute, shorter than the lateral spines, continued upwards as a carina to the base of the segment.

Hab. Interior of South Africa. (Presented by the Earl of Derby.)

Genus 16. CHELOSTOMA.

Apis, pt., *Linn. Faun. Suec.* 419 (1761).
Hylæus, pt., *Fabr. Ent. Syst.* ii. 302 (1793).
Anthophora, pt., *Fabr. Syst. Piez.* 372 (1804).
Chelostoma, *Latr. Gen. Crust. Ins.* iv. 161 (1809).
Heriades, pt., *Spin. Ins. Ligur.* fasc. ii. 9 (1808).

The labial palpi 4-jointed, the basal joint about one-third the length of the second, the third joint in a line with the second, the fourth placed at the side and near the apex of the third joint. The maxillary palpi 3-jointed, the joints minute and subovate.

1. CHELOSTOMA FLORISOMNE. B.M.

Apis florisomnis, *Linn. Faun. Suec.* 1704 ♂, and *Cab. Mus. Linn. Soc.*
Scop. Ent. Carn. p. 299. 796. f. 796.
Fabr. Syst. Ent. p. 387. 55.
Kirby, Mon. Ap. Angl. ii. 253. 49.
Apis maxillosa, *Linn. Syst. Nat.* i. 954. 11 ♀, and *Cab. Mus. Linn. Soc.*
Fabr. Mantis. i. 305. 86.
Kirby, Mon. Ap. Angl. ii. 251. 48.
Hylæus florisomnis, *Fabr. Ent. Syst.* ii. 304. 5 ♂.
Panz. Faun. Germ. 46. 13; *Syst. Piez.* p. 319. 3.
Hylæus maxillosus, *Fabr. Ent. Syst.* ii. 303. 4 ♀.
Panz. Faun. Germ. 53. 17.
Anthophora truncorum, *Fabr. Syst. Piez.* 379. 29. var. β ♀.
Megachile maxillosa, *Latr. Hist. Nat.* xiv. 51. 1 ♂ ♀.
Megachile florisomnis, *Spin. Ins. Lig.* fasc. i. 134. 1.
Chelostoma maxillosa, *Latr. Gen. Crust. et Ins.* iv. 162.
Brullé, Expéd. Sc. Morée, iii. 342. 757.
Blanch. Hist. Nat. Ins. iii. 409.
St. Farg. Hym. ii. 407. 1.
Chelostoma florisomnis, *Curtis, Brit. Ent.* xiv. t. 628 ♂.
Smith, Zool. iv. 1445. 1.
Heriades maxillosa, *Zett. Ins. Lapp.* 467. 2.
Nyland. Ap. Boreal. p. 268. 1; *Revis. Ap. Boreal.* p. 277. 2.
Chelostoma florisomne, *Eversm. Bull. Mosc.* xv. 74. 3.

Hab. Britain; France; Germany; Morea; Denmark; Russia; Sweden; Finland; Lapland.

2. Chelostoma nigricorne. B.M.

Heriades nigricornis, *Nyland. Ap. Boreal.* p. 269. 2.

Hab. France; Switzerland; Denmark; Sweden; Finland.

3. Chelostoma grande.

Heriades grandis, *Nyland. Revis. Ap. Boreal.* p. 277. 1.

Hab. Switzerland.

4. Chelostoma culmorum.

Heriades culmorum, *St. Farg. Hym.* ii. 408. 2 (*var.* H. florisomnis?).

Hab. France (Paris).

5. Chelostoma Campanularum. B.M.

Apis Campanularum, *Kirby, Mon. Ap. Angl.* i. 256. 50. t. 16. f. 14 ♀. 15 ♂.
Megachile Campanularum, *Latr. Hist. Nat.* xiv. 52. 2.
Heriades Campanularum, *Spin. Ins. Lig.* fasc. iii. 198. 1.
St. Farg. Hym. 405. 2.
Smith, Zool. iv. 1448. 2.
Nyland. Ap. Boreal. p. 273. 6.
Apis florisomnis minima, *Christ. Hym.* 197. t. 17. f. 18.
Chelostoma campanularum, *Eversm. Bull. Mosc.* xxv. 75. 4.

Hab. Britain; France; Italy; Germany; Russia; Denmark; Sweden and Finland.

6. Chelostoma robustum.

Heriades robusta, *Nyland. Ap. Boreal.* p. 270. 3.

Hab. Finland.

7. Chelostoma albifrons.

Chelostoma albifrons, *Kirby, Faun. Boreal. Amer.* p. 270. 1.

Hab. N. America.

8. Chelostoma rugifrons. B.M.

Female. Length 5 lines.—Black, the head strongly punctured; the face has some white pubescence on each side at the insertion of the antennæ; the mandibles very stout, having a tooth near their base within, their apex tridentate, the middle tooth minute, longitudinally grooved above. Thorax strongly punctured; its pubescence, as well as that of the legs, white, the claw-joint rufo-

testaceous, the tarsi beneath fulvous, the wings subhyaline, the nervures black. Abdomen cylindric, shining and strongly punctured; the basal and apical margins depressed; the first and three following segments have very narrow fasciæ of white pubescence, which is rather wider at the lateral margins; the fasciæ cross the segments about one-third within, curving backwards to the lateral apical margins, the sixth segment covered with white pubescence at the base; beneath densely clothed with white pubescence.

Hab. Georgia.

9. Chelostoma signatum.

Chelostoma signatum, *Eversm. Bull. Mosc.* xxv. 73. 1 (1852).

Hab. Russia.

10. Chelostoma inerme.

Chelostoma inerme, *Schäff. Nom. Ent.* p. 98.
Eversm. Bull. Mosc. xxv. 74. 2.

Hab. Russia.

Genus 17. HERIADES.

Apis, pt., *Linn. Faun. Suec.* 419; *Syst. Nat.* i. 954. 11 (1761).
Hylæus, pt., *Fabr. Ent. Syst.* ii. 302 (1793).
Anthophora, pt., *Fabr. Syst. Piez.* p. 372 (1804).
Megachile, pt., *Latr. Hist. Nat.* xiv. 52. sec. 2 (1805).
Heriades, pt., *Spin. Ins. Lig.* fasc. ii. 8 (1808).
Chelostoma and Heriades, *Latr. Gen. Crust. et Ins.* iv. 161 (1809).

The labial palpi 4-jointed, the basal joint not quite half the length of the second, the third and fourth minute, placed at the side and near the apex of the second joint. The maxillary palpi 3-jointed, the two basal joints short and stout, the apical joint slender, cylindric and pointed at the apex.

1. Heriades truncorum. B.M.

Apis truncorum, *Linn. Faun. Suec.* 1692; *Syst. Nat.* i. 955. 15, and *Cab. Mus. Linn. Soc.*
Kirby, Mon. Ap. Angl. ii. 258. 51.
Hylæus truncorum, *Fabr. Ent. Syst.* ii. 305. 9.
Panz. Faun. Germ. 64. 15.
Anthophora truncorum, *Fabr. Syst. Piez.* p. 379. 29.
Megachile truncorum, *Latr. Hist. Nat.* xiv. 52. 3.
Spin. Ins. Lig. fasc. 2. p. 9.

Heriades truncorum, *Spin. Ins. Lig.* fasc. 2. p. 9.
Curtis, Brit. Ent. xi. tab. 504.
St. Farg. Hym. ii. 405. 2.
Blanch. Hist. Nat. Ins. iii. 408.
Zett. Ins. Lapp. p. 467. 1.
Smith, Zool. iv. 1447. 1.
Nyland. Ap. Boreal. p. 271. 4; *Revis. Ap. Boreal.* p. 278.

Hab. Britain; France; Italy; Germany; Sweden; Finland; Lapland.

Genus 18. CERATINA.

Hylæus, pt., *Fabr. Ent. Syst.* ii. 302 (1793).
Apis, pt., *Fabr. Ent. Syst. Supp.* 273 (1796).
Megilla, pt., *Fabr. Syst. Piez.* 328 (1804).
Prosopis, pt., *Fabr. Syst. Piez.* 293 (1804).
Ceratina, *Latr. Hist. Nat.* xiv. 50 (1805).

The labial palpi four-jointed, the two basal joints elongate, the two apical ones minute, situated near the apex of the second joint at the side; the maxillary palpi six-jointed, the three basal joints of about equal length, subclavate, the three apical ones minute; the superior wings having one marginal and three submarginal cells. Claws of the tarsi bifid. The labial palpi are four-jointed.

Latreille and St. Fargeau only observed three joints to the labial palpi; the maxillary palpi are also incorrectly figured in the 'Exploration Scientifique de l'Algérie.'

1. CERATINA CÆRULEA. B.M.

Apis cærulea, *Vill. Ent. Europ.* iii. 88. t. 8. f. 25 ♂.
Apis cucurbitina, *Rossi, Mant.* i. 145. 325.
Apis callosa, *Fabr. Ent. Syst. Supp.* 277. 122–3.
Apis cyanea, *Kirby, Mon. Ap. Angl.* ii. 308. 71. t. 17. f. 7 ♀. 8 ♂.
Ceratina callosa, *Latr. Gen. Crust. Ins.* iv. 160.
St. Farg. & Serv. Encycl. Méth. x. 18. 1.
Blanch. Hist. Nat. Ins. iii. 409.
Eversm. Bull. Mosc. xxv. 88. 1.
Ceratina albilabris, *Latr. Hist. Nat.* xiv. 50.
Spin. Ins. Lig. i. 151. 1 ♀.
Megilla callosa, *Fabr. Syst. Piez.* 328. 31.
Ceratina nitidula, *Spin. Ins. Lig.* 151. 2 ♂; ii. *App.* 80.
Ceratina cyanea, *St. Farg. Hym.* ii. 505. 1.
Ceratina cærulea, *Smith, Zool.* iv. 1448. 1.
Dufour, Ann. Soc. Ent. Fr. ix. (1840) p. 15. 5.

Hab. Britain; France; Italy; Russia.

2. Ceratina albilabris. B.M.

Hylæus albilabris, *Fabr. Ent. Syst.* ii. 305. 10.
Prosopis albilabris, *Fabr. Syst. Piez.* 293. 2.
Ceratina callosa, *Latr. Gen. Crust. et Ins.* tab. 14. fig. 11.
Ceratina albilabris, *Jurine, Hym.* 234.
Germar, Faun. Ins. Europ. fasc. 5. f. 17.
St. Farg. Hym. ii. 506. 2. exclus. syn.
Smith, Zool. App. vii. 57.
Dufour, Ann. Soc. Ent. Fr. ix. (1840) 16.
Lucas, Explo. Sc. Algér. iii. 223. 171.

Hab. Britain?; France; Italy; Algeria.

3. Ceratina ænea. B.M.

Ceratina ænea, *Brullé, Expéd. Sc. Morée*, iii. 341. 756. pl. 48. f. 10 ♂.

The female resembles the male, differing only in having a minute spot on the clypeus and in wanting the spine on the second ventral plate of the abdomen.

Hab. The Morea; Albania.

4. Ceratina decolorans.

Ceratina decolorans, *Brullé, Expéd. Sc. Morée*, iii. 340. 755. pl. 48. f. 9.

Hab. The Morea.

5. Ceratina parvula.

Female. Length 1½ line.—Black, head polished, smooth and shining, the clypeus on each side anteriorly stained with yellow, mandibles pale ferruginous, the antennæ testaceous beneath. Thorax smooth and shining, wings hyaline, iridescent, the nervures pale testaceous, the tegulæ testaceous; the legs rufo-testaceous, the tarsi pale; the apical margins of the segments of the abdomen testaceous, the abdomen is delicately punctured, the two apical segments more strongly so, and having scattered pale hairs; beneath testaceous.

Hab. Albania. (In Coll. W. W. Saunders, Esq.)

6. Ceratina mauritanica. B.M.

Ceratina mauritanica, *St. Farg. Hym.* ii. 507. 3.
Lucas, Explo. Sc. Algér. iii. 223. 172. t. 10. f. 10.

Hab. Algeria (Oran).

7. Ceratina subquadrata. B.M.

Female. Length 3¼ lines.—Black, the face coarsely punctured, the cheeks and mandibles smooth and shining; the clypeus truncate, not produced beyond the base of the mandibles and having an oblong cream-coloured stripe; the margin of the vertex rounded behind, giving the head a subquadrate form. Thorax, the tubercles and a line in front at the base of the anterior tibiæ white, the intermediate and posterior legs wanting. Abdomen much narrowed towards the base, the apical margins of the three basal segments smooth and shining, and having a transverse impressed line, the three apical segments roughened.

Hab. South Africa.

8. Ceratina armata.

Female. Length 3½ lines.—Black, closely and strongly punctured; the clypeus has a central yellow groove, the punctures running irregularly into lines; the labrum and mandibles are similarly sculptured. Thorax, the tubercles and a minute spot at the base of the tibiæ above, yellow; the metathorax opake, very finely punctured; the wings fusco-hyaline, darkest at their apical margins; the legs dark rufo-testaceous, fringed with a pale glittering pubescence; that on the tarsi dense and pale fulvous; the claws ferruginous, the calcaria pale testaceous, the posterior tibiæ armed in the middle exteriorly with a sharp stout spine. Abdomen, the basal segment depressed above, smooth, shining and finely punctured, on the fourth, fifth and sixth segments the punctures run into lines, the apical segment has a central raised carina; beneath, covered with strong elongate punctures.

Hab. Cape of Good Hope. (Coll. Fred. Smith.)

9. Ceratina viridis. B.M.

Ceratina viridis, *Guér. Icon. R. An. Ins.* 444. t. 73. f. 6.
(Var. *a.* of a rich coppery green.)

Hab. Bengal; Ceylon; China.

10. Ceratina picta. B.M.

Female. Length 3 lines.—Head and thorax black, smooth and shining; a line on the cheeks, a narrow one along the inner orbits of the eyes suddenly broadly expanded on each side of the clypeus, two short oblique lines meeting in front of the stemmata, a triangular spot at the base of the clypeus and a transverse line on its anterior margin, yellow; from the latter two very

narrow abbreviated lines run from the centre; the mandibles have also a yellow spot at their base; the labrum ferruginous. Thorax, except the disk which is shining and impunctate, closely punctured; the disk has two narrow parallel lines not reaching the collar or the base of the scutellum, a short narrow line over the tegulæ, a dot on the collar laterally, the tubercles and the middle of the scutellum, yellow; the wings fusco-hyaline, the nervures fuscous; a transverse curved line on each side of the pectus, and a short one in front of each intermediate coxa; the legs reddish-yellow, the femora and coxæ more or less stained with fuscous. Abdomen entirely ferruginous.

Hab. Ceylon.

11. Ceratina similllima. B.M.

Male. Length 2½ lines.—Black, a trilobate spot on the clypeus, a transverse stripe above, widest in the middle; the inner margins of the eyes as high as the insertion of the antennæ, above each of which is a minute oblique spot, and behind the eyes towards their vertex an oblique cream-coloured stripe. The thorax has a lunate spot on the scutellum, two narrow stripes on the disk, a minute spot over the tegulæ, the collar and tubercles cream-coloured; the legs testaceous, the apex of the femora, the tibiæ and tarsi yellowish-white; the apical margins of the segments have narrow white fasciæ, interrupted in the middle, that on the basal segment waved; the abdomen beneath testaceous at the base.

Hab. East Indies.

12. Ceratina sculpturata.

Female. Length 4 lines.—Black, closely and deeply punctured; head, the clypeus has a transverse lunate yellow spot, and a similar yellow spot is situated on the face on each side; the punctures run into lines on the clypeus, those on the vertex are very large and deeply impressed; the mandibles have a triangular yellow spot at their base. Thorax, the disk shining, the metathorax opake, very closely and finely punctured, the wings fuscous, their tegulæ testaceous, their outer margins pale; the legs have a fringe of pale pubescence beneath; the tarsi are densely covered with a glittering pale yellow pubescence, the claws and the apical joints ferruginous. The apical segments of the abdomen rugose; beneath, covered with a short griseous pubescence.

Hab. Senegal. (Coll. Fred. Smith.)

13. Ceratina hieroglyphica. B.M.

Female. Length 3–4 lines.—Black, a T-shaped mark on the clypeus, a transverse line above, two spots above the insertion of the antennæ, and an abbreviated line on the inner and outer margin of the eyes, yellow. Thorax, a lunate spot on the scutellum, two abbreviated lines on the mesothorax, an epaulet over the tegulæ, the collar and tubercles yellow; the tibiæ above and the tarsi yellow, the latter stained with ferruginous; the segments of the abdomen have a transverse yellow band not quite touching the apical margins, the bands attenuated on each side, and towards the extreme lateral margins they are suddenly widened, the basal segment has a central spot and one on each side, the three united by two narrow curved lines; sometimes the basal segment has a transverse yellow line, which has two black spots; the apical segment black; beneath, the margins of the segments are narrowly testaceous, and ciliated with pale hairs.

The male closely resembling the female, the yellow markings being broader, the scape of the antennæ in front, the labrum and anterior femora are also yellow, the margins of the abdominal segments beneath are more broadly testaceous; the entire insect closely and rather strongly punctured, the disk of the thorax and the region of the insertion of the antennæ polished and sparingly punctured.

Hab. Northern India; Hong Kong; Philippine Islands.

14. Ceratina maculata.

Male. Length 3 lines.—Green, closely and strongly punctured, the clypeus and a circular spot on the labrum cream-coloured; the antennæ and mandibles black. Thorax, the tubercles and a line on the anterior femora beneath and on the tibiæ in front, another at the base of the posterior tibiæ above, yellow; the tarsi rufo-testaceous; the wings subhyaline, the tegulæ and nervures rufo-testaceous. Abdomen, the basal margins of all the segments and a large lunate spot on each side of the fourth, fifth and sixth segments black, the three basal segments have on each side a minute black spot; the seventh segment has a central raised carina, produced at the apex into an obtuse spine.

Hab. Java. (Coll. W. W. Saunders, Esq.)

15. Ceratina smaragdina.

Female. Length 4 lines.—Brilliant green, closely and strongly punctured; the antennæ, anterior margin of the clypeus, the labrum and mandibles black; the labrum on each side and the

mandibles at their base tinged with green. Thorax, the disk smooth and having a few large scattered punctures and four abbreviated longitudinal impressed lines, the wings fusco-hyaline; the posterior tibiæ and all the tarsi have a long thin griseous pubescence, that on the tarsi beneath is pale fulvous; the claws ferruginous. Abdomen of a blue-green in certain lights, the three apical segments rugose.

Hab. Java. (Coll. W. W. Saunders, Esq.)

16. CERATINA DUPLA. B.M.

Ceratina dupla, *Say*, *Bost. Journ. Nat. Hist.* i. 397.

Hab. Indiana, U. States; St. John's Bluff, East Florida. (E. Doubleday, Esq.)

17. CERATINA LÆTA. B.M.

Ceratina læta, *Spin. Ann. Soc. Ent. Fr.* x. 138. 87 (1841).

Hab. Cayenne; Brazil (Ega).

18. CERATINA CHALCEA.

Ceratina chalcea, *Spin. Ann. Soc. Ent. Fr.* x. 139. 88 (1841).

Hab. Cayenne.

19. CERATINA PUNCTULATA.

Ceratina punctulata, *Spin. Ann. Soc. Ent. Fr.* x. 139. 89 (1841).

Hab. Cayenne.

20. CERATINA LUCIDULA. B.M.

Female. Length 1½ line.—Olive-green, very bright and shining, the two basal joints of the antennæ pale testaceous, the flagellum rufo-fuscous; the mandibles, labrum and anterior margin of the clypeus pale yellow-testaceous. The disk of the thorax very smooth and shining, anteriorly are a few scattered large punctures; the scutellum has also some coarse punctures, the metathorax closely and finely punctured; the tegulæ pale yellow-testaceous, the legs of the same colour, the wings hyaline, the stigma fuscous; the abdomen has a short scattered pale pubescence, and is somewhat coarsely punctured towards the apex.

Hab. Santarem (Brazil). (Coll. W. W. Bates, Esq.)

21. CERATINA MACULIFRONS.

Female. Length 4 lines.—Olive-green, closely and strongly punctured, a spot on the clypeus touching its anterior margin.

and two on the face on each side of the clypeus touching the margin of the eyes, yellow; an elongate yellow stripe behind the eyes; antennæ, labrum and mandibles black. Thorax, the anterior femora at their apex above, and all the tibiæ at their base yellow; the posterior tibiæ have a short spine near their base exteriorly; the posterior tibiæ and all the tarsi densely covered with cinereous pubescence, the claws and apical joints of the tarsi ferruginous; the metathorax on each side covered with white pubescence; abdomen, the margins of the three basal segments depressed, smooth and shining, the three apical ones rugose.

Hab. Brazil. (Coll. Fred. Smith.)

Genus 19. ALLODAPE.

Allodape, *St. Farg. Hym.* ii. 531.

Maxillary palpi six-jointed, the basal joint thickest, nearly as long as the two following, the three apical ones minute, the labial palpi four-jointed, the two basal ones elongate, the apical ones minute; the superior wings having one marginal and two submarginal cells.

In the 'Encyclopédie Méthodique,' and also in St. Fargeau's 'Hymenoptera,' the number of joints in the maxillary palpi is incorrectly given; it has therefore been necessary to give the above short correction.

1. ALLODAPE RUFOGASTRA. B.M.

Allodape rufogastra, *St. Farg. Ency. Méth.* x. 119. 1; *Hym.* ii. 531. 1 ♀.
Blanch. Hist. Nat. Ins. iii. 412.

The male closely resembles the female, but has the clypeus entirely yellow; the abdomen is black at its extreme base as well as the four apical segments, except the base of the fourth; the apical segment is obtuse and fringed with curled fulvous pubescence.

Hab. South Africa. (Coll. the Rev. D. F. Morgan.)

2. ALLODAPE PICTIFRONS. B.M.

Female. Length 3¼ lines.—Black, a narrow yellow stripe along the inner margins of the eyes, and another down the middle of the clypeus, which is produced and rounded at its anterior margin; the face on each side above the clypeus depressed, as in the genus *Ceratina*, the antennæ inserted in the depressions, between which is a raised carina running from the clypeus to the

anterior stemma, where it divides and partly encloses it; the head is shining and strongly punctured. Thorax smooth and shining on the disk, very delicately punctured, interspersed with larger punctures, particularly the scutellum and sides of the thorax; wings subhyaline, the nervures fuscous; the legs have a pale glittering pubescence, that on the tarsi, which is dense, slightly yellow; the posterior tibiæ towards their apex in front and the claw-joint of the tarsi ferruginous. Abdomen shining, delicately punctured, and covered with shallow rough sculpturing, particularly the three apical segments; the entire margins of the segments narrowly rufo-testaceous.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

This species sometimes has a yellow transverse line on the scutellum, more or less frequently entirely obsolete.

3. Allodape similllima. B.M.

Female. Length 3¼ lines.—Black, very closely resembling *A. pictifrons*; the clypeus is, however, more produced, and has a broad pear-shaped yellow spot extending from its base to the apex; the thorax is similarly sculptured; the base of the wings and outer margins of the tegulæ are pale testaceous, the wings hyaline, the second submarginal cell narrowed towards the marginal, more angulated than in *A. pictifrons*, but the abdomen is of the same form and colour, and is similarly sculptured.

Hab. Australia (Macintyre River). (Coll. — Ker, Esq.)

4. Allodape foveata. B.M.

Female. Length 4 lines.—Black, shining and punctured, the clypeus pale yellow. Thorax, the disk smooth and very delicately punctured, the metathorax fringed on each side with silvery glittering hairs; the tegulæ rufo-testaceous, the nervures ferruginous; the posterior tibiæ and all the tarsi clothed with a glittering pale pubescence, the claw-joints ferruginous; the calcaria pale testaceous. Abdomen oblong, narrowest at the base, which has a deep fovea, the apex acute; delicately punctured and interspersed with larger punctures, most closely so towards the apex; the margins of the segments narrowly testaceous. Beneath, the thorax is thinly covered with griseous pubescence, the margins of the segments are fringed with pubescence of the same colour.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

5. Allodape variegata. B.M.

Female. Length 3 lines.—Head and thorax black, smooth

and shining, the clypeus and labrum yellow-testaceous, the mandibles ferruginous towards the apex; the scape ferruginous in front, the face depressed, an elevated carina passing between the antennæ from the clypeus to the anterior stemma. The disk of the thorax glossy, thinly scattered over with pale hairs, and having a central impressed line passing from the collar to the middle of the mesothorax, also a shorter line on each side; the collar and scutellum yellow; the tegulæ, extreme base of the wings and the nervures testaceous, the wings hyaline and beautifully iridescent; the legs pale rufo-testaceous, having the coxæ, trochanters and base of the femora black, the two former pale testaceous at their extreme apex; the posterior legs have a long pale glittering pubescence. The abdomen oblong, rufo-testaceous; the basal segment has a central depression, the apical segments are dark fuscous and the sides of the anterior segments are spotted with the same colour, the two apical segments covered with short white hairs; the apex acute; beneath, pale rufo-testaceous.

Hab. Port Natal. (Coll. R. H. Plant.)

6. ALLODAPE UNICOLOR. B.M.

Female. Length $2\frac{1}{2}$ lines.—Black and shining, the clypeus having an elongate cream-coloured spot, transverse at the base and pointed at the apex of the clypeus. The metathorax delicately punctured, the wings hyaline, their extreme base yellowish, the nervures fuscous; the posterior legs and all the tarsi thinly covered with pale glittering pubescence, the claws testaceous; abdomen very delicately transversely aciculate, the apical segments rugose; the apex of the abdomen acute.

Hab. New Holland.

7. ALLODAPE MARGINATA. B.M.

Female. Length $2\frac{1}{2}$ lines.—Black, the clypeus cream-coloured, the labrum, apex of the mandibles and antennæ beneath ferruginous. Thorax, the disk smooth and shining, the scutellum and metathorax delicately punctured; the tubercles, tegulæ and base of the wings of a pale testaceous-yellow; the wings hyaline and iridescent, the nervures pale ferruginous; the posterior legs and the tarsi covered with a glittering pale pubescence, the apical joints of the tarsi and the calcaria pale testaceous. Abdomen oblong, acute at the apex, towards which it is roughened; the margins of all the segments narrowly pale testaceous.

Hab. East Indies?

8. Allodape mucronata.

Female. Length 6 lines.—Black, the head shining, strongly punctured; a narrow short yellow line along the inner margin of the eyes; on the lower part of the face parallel with the sides of the clypeus is a raised carina which reaches the base of the mandibles; the clypeus somewhat produced, covered as well as the labrum with coarse punctures; on each side of the stemmata on the vertex are some deep shining depressions, and a narrow yellow stripe along the hinder margins of the eyes. Thorax, the disk very smooth and shining, the prothorax coarsely punctured; the sides of the thorax have a thin pale fulvous pubescence, the tubercles having a thick fringe of the same behind; the posterior tibiæ and all the tarsi densely covered with pale fulvous pubescence, the legs being dark rufo-testaceous, the tegulæ are of the same colour, the wings subhyaline, the metathorax rounded and delicately and closely punctured. Abdomen shining, strongly punctured, of a dark rufo-testaceous colour above, beneath much paler and varied with dark stains, very smooth and shining, the apical portion of the segments punctured; above is a short, thin griseous pubescence, the margins of the segments being pale testaceous; the apical segment terminating in a sharp mucro, on each side of which the margin is angulated; the abdomen is recurved and somewhat concave towards the apex.

Hab. Cape of Good Hope. (Coll. Fred. Smith.)

9. Allodape picta. B.M.

Male. Length $2\frac{1}{2}$ lines.—Black, antennæ pale fulvous beneath, fuscous above, the apical joint dilated and compressed; the clypeus and the face on each side yellow, a narrow yellow line along the inner margin of the eyes; the mandibles and labrum of a testaceous-yellow. Thorax impunctate, the metathorax rounded behind; the tegulæ testaceous, wings hyaline, the nervures testaceous; the legs rufo-testaceous, the anterior and intermediate tibiæ yellow in front. Abdomen smooth and shining, the second, third and fourth segments have on each side at their basal margins a transverse yellow spot; the apex of the abdomen acute.

Hab. Australia.

10. Allodape panurgoides. B.M.

Female. Length 4 lines.—Black and shining, the face closely and strongly punctured; a narrow line on the clypeus and another close to the eyes yellow; the cheeks very smooth and shining, the punctures scattered; the flagellum rufo-testaceous beneath.

Thorax, the disk smooth and shining, having a central impressed line and two on each side; the wings fusco-hyaline, the tegulæ testaceous, the nervures ferruginous. The posterior tibiæ and all the tarsi clothed with short bright fulvous pubescence, the claws ferruginous. Abdomen covered with strong elongate punctures, most dense towards the apex.

Hab. South Africa. (Coll. the Rev. D. F. Morgan.)

Genus 20. EXONEURA, n. g.

(F. Smith's MSS.)

Head transverse, ocelli placed in a triangle on the vertex; the labrum obtuse at the apex, about the same length as the mentum; the labial palpi four-jointed, the two basal joints elongate, about equal in length, the two apical ones minute; the maxillary palpi six-jointed. The superior wings having one marginal and two submarginal cells; the first recurrent nervure received by the second submarginal cell, the second recurrent nervure and third discoidal cell obsolete; the posterior tibiæ having a thin scopa of pubescence; the claws of the tarsi bifid.

1. Exoneura bicolor. B.M.

Female. Length 3 lines.—Head and thorax black, smooth and shining; the face delicately punctured, the ocelli very bright and glassy; the scape of the antennæ in front and a line down the clypeus pale yellow-testaceous; the labrum and mandibles rufo-testaceous, the latter black at their base and apex. Thorax impunctate, the metathorax rounded, the margins of the tegulæ rufo-testaceous, the nervures of the wings ferruginous, palest towards the base of the wings, which are fulvo-hyaline; the legs ferruginous, the coxæ, trochanters and base of the femora black; the posterior tibiæ and all the tarsi clothed with a glittering pale fulvous pubescence, that on the former stained with fuscous above. Abdomen ferruginous, subclavate; the basal segment has a central depression, which is black; the two apical segments very finely transversely reticulate, intermixed with punctures; the apex acute.

Var. B. The posterior femora and tibiæ black, except their base and apex; the basal and second segment more or less stained with fuscous.

Hab. Australia (Swan River); Van Diemen's Land.

Subfam. 3. DENUDATÆ.

Genus 21. NOMADA.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Nomada, pt., *Fabr. Ent. Syst.* ii. 345 (1793).

1. NOMADA ALTERNATA. B.M.

Apis Marshamella, *Kirby, Mon. Ap. Angl.* ii. 188. 10 ♀, et *Cab. Mus. Ent. Soc.*
Apis alternata, *Kirby, Mon. Ap. Angl.* ii. 182. 5 ♂, et *Cab. Mus. Ent. Soc.*
Nomada Marshamella, *Schäff. Germ. Zeits.* i. 285. 25.
Smith, Zool. ii. 590. 3.
Eversm. Bull. Mosc. xxv. 92. 2.

Hab. Britain; France; Germany.

2. NOMADA ANNULARIS.

Nomada annularis, *St. Farg. Ency. Méth.* viii. 366. 9.

Hab. France.

3. NOMADA ATRA.

Nomada atra, *Smith, Zool.* iv. 1568.

Hab. Britain.

4. NOMADA ARMATA. B.M.

Nomada armata, *Schäff. Germ. Zeits.* i. 279. 10.
Smith, Zool. vii. *App.* 41.
Nomada Kirbii, *Steph. Ill. Brit. Ent. Mand.* vii. t. 41.
Nomada cincticornis, *Nyland. Ap. Boreal.* 182. 12.

Hab. Britain; Germany; Albania; Denmark; Sweden; Finland.

5. NOMADA AGRESTIS. B.M.

Nomada agrestis. *Fabr. Ent. Syst.* ii. 347; *Syst. Piez.* p. 390. 1.
St. Farg. Hym. ii. 467. 4; *Ency. Méth.* viii. 364. 1.
Lucas, Explo. Sc. Algér. iii. 218. t. 10. f. 3.

Hab. Spain; Portugal; Algeria.

6. NOMADA BACCATA. B.M.

Nomada baccata, *Smith, Zool.* ii. 604. 20 ♂ ♀.
Nyland. Revis. Ap. Boreal. p. 230.

Hab. Britain.

7. NOMADA BOREALIS. B.M.

Nomada borealis, *Zett. Ins. Lapp.* p. 470. 1 ♀.
Nyland. Ap. Boreal. p. 181. 11.
Nomada inquilina, *Smith, Zool.* ii. 605. 21 ♂ ♀.

Hab. Britain; Denmark; Sweden; Finland; Lapland.

8. NOMADA FLAVOGUTTATA. B.M.

Apis flavoguttata, *Kirby, Mon. Ap. Angl.* ii. 215. 31 ♂, et *Cab. Mus. Ent. Soc.*
Nomada flavoguttata, *Smith, Zool.* ii. 598. 12 ♂ ♀.

Hab. Britain.

9. NOMADA FABRICIANA. B.M.

Apis Fabriciana, *Linn. Syst. Nat.* i. 955. 17.
Rossi, Faun. Etrus. Mant. no. 324.
Nomada Fabriciana, *Fabr. Ent. Syst.* ii. 348. 10.
Spin. Ins. Lig. fasc. 1. 152. 4.
St. Farg. Ency. Méth. viii. 371. 27.
Schäff. Germ. Zeits. i. 277. 6.
Brullé, Expéd. Sc. de Morée, iii. 346. 765.
Smith, Zool. ii. 598. 11.
Nyland. Ap. Boreal. p. 183. 14.
Eversm. Bull. Mosc. xxv. 97. 14.
Apis Fabriciella, *Kirby, Mon. Ap. Angl.* 214. 30 ♀.
Apis 4-notata, *Kirby, Mon. Ap. Angl.* ii. 214. 30 ♂.
Nomada quadrinotata, *St. Farg. Hym.* ii. 494. 26.

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

10. NOMADA FURVA. B.M.

Nomada furva, *Panz. Faun. Germ.* 55. 25 ♂.
St. Farg. Hym. ii. 495. 27 ♂ ♀; *Ency. Méth.* viii. 373. 36.
Smith, Zool. ii. 599. 13 ♂ ♀.
Apis rufo-cincta, *Kirby, Mon. Ap. Angl.* ii. 216. 32 ♀, et *Cab. Mus. Ent. Soc.*
Apis Sheppardana, *Kirby, Mon. Ap. Angl.* ii. 217. 33 ♀, et *Cab. Mus. Ent. Soc.*
Nomada minuta, *Fabr. Syst. Piez.* 394. 19 ♀.
Spin. Ins. Lig. fasc. 1. 152. 8.
St. Farg. Ency. Méth. viii. 373. 35.
Schäff. Germ. Zeits. i. 278. 7.
Nyland. Ap. Boreal. p. 184. 15.
Eversm. Bull. Mosc. xxv. 98. 16.

Nomada conjungens, *Schäff. Germ. Zeits.* i. 279. 8.
Nomada Dalii, *Curt. Brit. Ent.* ix. t. 419 ♂.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

11. NOMADA FLAVICORNIS. B.M.

Nomada flavicornis, *Rossi, Faun. Etrus.* ii. 112. 934.

Hab. Italy; South of France; Albania.

12. NOMADA GERMANICA. B.M.

Nomada Germanica, *Panz. Faun. Germ.* 72. 17 ♀.
Fabr. Syst. Piez. p. 394. 18.
St. Farg. Hym. ii. 477. 13; *Ency. Méth.* viii. 372. 32.
Apis ferruginata, *Kirby, Mon. Ap. Angl.* ii. 218. 34, et t. 16. f. 4 ♂ (non *Linn.*).
Nomada stigma, *Fabr. Syst. Piez.* p. 393. 11.
Nomada ferruginata, *Schäff. Germ. Zeits.* i. 275. 1.
Brullé, Expéd. Sc. Morée, iii. 346. 763.
Smith, Zool. ii. 600. 14.
Nyland. Ap. Boreal. p. 183. 13.
Nomada pleurosticta, *Schäff. Germ. Zeits.* i. 276. 2.

Hab. Britain; France; Germany; Portugal; Denmark.

13. NOMADA INTERRUPTA.

Nomada interrupta, *Panz. Faun. Germ.* 53. 24.
St. Farg. Ency. Méth. viii. 369. 19.

Hab. Germany.

14. NOMADA FUSCICORNIS.

Nomada fuscicornis, *Nyland. Ap. Boreal.* p. 185. 17.

Hab. Finland.

15. NOMADA FULVICORNIS. B.M.

Nomada fulvicornis, *Fabr. Ent. Syst.* ii. 348. 11; *Syst. Piez.* p. 393. 12.
St. Farg. Hym. ii. 468. 5; *Ency. Méth.* viii. 371. 30.
Spin. Ins. Lig. 152. 5.

Hab. Italy; France.

16. NOMADA JACOBÆÆ. B.M.

Nomada Jacobææ, *Panz. Faun. Germ.* 72. 20 ♂.
Latr. Hist. Nat. xiv. 50. 2.
Schäff. Germ. Zeits. i. 286. 21.

Nomada Jacobææ, *St. Farg. Hym.* ii. 479. 15; *Ency. Méth.* viii. 369. 17.
Smith, Zool. ii. 594. 7 ♂ ♀.
Nyland. Ap. Boreal. p. 175. 2.
Eversm. Bull. Mosc. xxv. 94. 7.
Nomada interrupta, *Panz. Faun. Germ.* 96. 22?
Apis Jacobææ, *Kirby, Mon. Ap. Angl.* ii. 201. 20 ♂.
Apis flavopicta, *Kirby, Mon. Ap. Angl.* ii. 202. 21 ♀, and *Cab. Mus. Ent. Soc.*

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

17. Nomada lateralis. B.M.

Nomada lateralis, *Panz. Faun. Germ.* 96. 20 ♀, 21 ♂.
Schäff. Germ. Zeits. i. 227. 5.
Smith, Zool. ii. 601. 16.
Eversm. Bull. Mosc. xxv. 97. 13.
Nomada melanostoma, *Schäff. Germ. Zeits.* i. 280. 11. var. ♂.

Hab. Britain; France; Germany; Russia.

18. Nomada Lathburiana. B.M.

Apis Lathburiana, *Kirby, Mon. Ap. Angl.* ii. 183. 6 ♂, and *Cab. Mus. Ent. Soc.*
Apis rufiventris, *Kirby, Mon. Ap. Angl.* ii. 187. 9 ♀, and *Cab. Mus. Ent. Soc.*
Nomada rufiventris, *Smith, Zool.* ii. 590. 2 ♂ ♀.
Nyland. Revis. Ap. Boreal. p. 230.
Nomada Marshamella, *Nyland. Ap. Boreal.* p. 176. 3.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

19. Nomada labiata.

Nomada labiata, *St. Farg. Encycl. Méth.* viii. 368. 16.

Hab. France.

20. Nomada lineola. B.M.

Nomada lineola, *Panz. Faun. Germ.* 55. 23 ♀.
St. Farg. Hym. ii. 486. 20; *Encycl. Méth.* viii. 367. 11.
Smith, Cat. Brit. Hym. p. 88. 20.
Apis cornigera, *Kirby, Mon. Ap. Angl.* ii. 190. 11 ♀, and *Cab. Mus. Ent. Soc.* var.
Apis subcornuta, *Kirby, Mon. Ap. Angl.* ii. 192. 12. var. ♀, and *Cab. Mus. Ent. Soc.* var.
Apis Capræ, *Kirby, Mon. Ap. Angl.* ii. 193. 13. var. ♀, and *Cab. Mus. Ent. Soc.* var.

Apis lineola, *Kirby, Mon. Ap. Angl.* ii. 194. 14. var. ♀, and *Cab. Mus. Ent. Soc.*
Apis sexcincta, *Kirby, Mon. Ap. Angl.* ii. 198. 17 ♂, and *Cab. Mus. Ent. Soc.*
Nomada cornigera, *St. Farg. Hym.* ii. 481. 16.
Smith, Zool. ii. 591. 4 ♂, ♀.

Hab. Britain; France; Germany; Denmark; Sweden.

21. NOMADA MISTURA.

Nomada mistura, *Smith. Zool.* ix. *App.* p. 127.

Hab. Britain. (Coll. F. Smith.)

22. NOMADA NIGRICORNIS.

Nomada nigricornis, *St. Farg. Encycl. Méth.* viii. 372. 31.

Hab. France (Paris).

23. NOMADA NIGELLA.

Nomada nigella, *Nyland. Ap. Boreal.* p. 176. 4.

Hab. Siberia.

24. NOMADA OCHROSTOMA. B.M.

Apis ochrostoma, *Kirby, Mon. Ap. Angl.* ii. 209. 26 ♂, and *Cab. Mus. Ent. Soc.*
Nomada ochrostoma, *Schiff. Germ. Zeits.* i. 280. 13 ♂.
Zett Ins. Lapp. p. 470. 2.
Smith, Zool. ii. 596. 9.
Nyland. Ap. Boreal. p. 179. 9; *Revis. Ap. Boreal.* p. 229. 4.
Apis Hillana, *Kirby, Mon. Ap. Angl.* ii. 208. 25 ♂, var.
Nomada vidua, *Smith, Zool.* ii. 602. 18 ♀.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

25. NOMADA OBLIQUA.

Nomada obliqua, *St. Farg. Encycl. Méth.* viii. 366. 6.

Hab. France.

26. NOMADA OBSCURA.

Nomada obscura, *Zett. Ins. Lapp.* p. 470. 3.
Nyland. Ap. Boreal. p. 178. 6.

Hab. Sweden; Finland; Lapland.

27. Nomada obtusifrons.

Nomada obtusifrons, *Nyland. Ap. Boreal.* p. 184. 16.

Hab. Sweden; Finland.

28. Nomada ruficornis. B.M.

Apis ruficornis, *Linn. Faun. Suec.* 1707; *Syst. Nat.* i. 958. 34, and *Cab. Mus. Linn. Soc.* ♀.
Kirby, Mon. Ap. Angl. ii. 210. 27.
Nomada ruficornis, *Fabr. Syst. Ent.* p. 389. 3; *Ent. Syst.* ii. 347. 7; *Syst. Piez.* p. 309. 2.
Rossi, Faun. Etrus. ii. 112. 933.
Panz. Faun. Germ. 55. 18.
Latr. Hist. Nat. xiv. 50. 1.
Schäff. Germ. Zeits. i. 279. 9.
St. Farg. Ency. Méth. viii. 366. 7 ♂ ♀; *Hym.* ii. 498. 29.
Blanch. Hist. Nat. des Ins. iii. 411.
Smith, Zool. ii. 596. 9.
Nyland. Ap. Boreal. p. 180. 10.
Eversm. Bull. Mosc. xxv. 96. 11.
Nomada flava, *Panz. Faun. Germ.* 55. 21 ♂.
Fabr. Syst. Piez. p. 391. 4.
Lucas, Explo. Sc. Algér. iii. 221. 165.
Nyland. Ap. Boreal. p. 179. 8.
Eversm. Bull. Mosc. xxv. 95. 9.
Apis flava, *Kirby, Mon. Ap. Angl.* ii. 186. 8 ♂.
Apis leucophthalma, *Kirby, Mon. Ap. Angl.* ii. 197. 16. var. ♂.
Nomada conjungens, *Schäff. Germ. Zeits.* i. 279. 8. var. ♂.

Hab. Britain; France; Germany; Italy; Denmark; Russia; Sweden; Finland; N. America; Canada.

29. Nomada Roberjeotiana.

Nomada Roberjeotiana, *Panz. Faun. Germ.* 72. 18 ♂, 72. 19 ♀.
Fabr. Syst. Piez. p. 391. 6 ♀.
Spin. Ins. Lig. fasc. 1. 151. 2.
St. Farg. Ency. Méth. viii. 368. 14.
Schäff. Germ. Zeits. i. 283. 19 ♀.
Smith, Zool. ii. 603. 19 ♂ ♀.
Nyland. Ap. Boreal. 178. 7 ♂; *Revis. Ap. Boreal.* 231. 6.
Eversm. Bull. Mosc. xxv. 99. 17.
Nomada neglecta, *Schäff. Germ. Zeits.* i. 283. 20 ♂.

Hab. Britain; Italy; Germany; Denmark; Sweden; Finland.

30. NOMADA RUFA. B.M.

Nomada rufa, *Rossi, Faun. Etrus.* ii. 111. 932; *Mantis. Illig. Ed.* ii. 182.

Hab. Italy; South of France; Portugal; Tunis.

31. NOMADA RUFIPES.

Nomada rufipes, *Fabr. Ent. Syst.* ii. 347. 8.

Hab. Germany.

32. NOMADA RUBRA. B.M.

Nomada rubra, *Smith, Zool.* vii. *App.* 41.

Hab. Britain.

33. NOMADA SOLIDAGINIS. B.M.

Nomada solidaginis, *Panz. Faun. Germ.* 72. 21 ♂.
Spin. Ins. Lig. fasc. 1. 152. 3.
Schäff. Germ. Zeits. i. 284. 23 ♂ ♀.
St. Farg. Hym. ii. 472. 8; *Ency. Méth.* viii. 369. 18.
Smith, Zool. ii. 595. 8.
Nyland. Ap. Boreal. p. 176. 3 ♀.
Eversm. Bull. Mosc. xxv. 94. 5.
Apis Solidaginis, *Kirby, Mon. Ap. Angl.* ii. 204. 22, and *Cab. Mus. Ent. Soc.*
Apis picta, *Kirby, Mon. Ap. Angl.* ii. 206. 23. var. ♀, and *Cab. Mus. Ent. Soc.*
Apis rufo-picta, *Kirby, Mon. Ap. Angl.* ii. 207. 24. var. ♀, and *Cab. Mus. Ent. Soc.*

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Russia.

34. NOMADA SIGNATA. B.M.

Nomada signata, *Jurine, Hym.* tab. 11. gen. 31.
St. Farg. Ency. Méth. 370. 25.
Smith, Zool. ii. 602. 17.
Nomada flava, *Schäff. Germ. Zeits.* i. 279. 9.

Hab. Britain; France; Germany; Switzerland.

35. NOMADA SUCCINCTA. B.M.

Nomada succincta, *Panz. Faun. Germ.* 55. 21.
Spin. Ins. Lig. fasc. 1. 152. 7.
Schäff. Germ. Zeits. i. 287. 30.
St. Farg. Hym. ii. 469. 6; *Ency. Méth.* viii. 372. 33.

Nomada succincta, *Lucas, Explo. Sc. Algér.* iii. 218. 158.
Nyland. Ap. Boreal. p. 175. 1.
Smith, Cat. Hym. p. 89. 24.
Eversm. Bull. Mosc. xxv. 92. 1.
Apis Goodeniana, *Kirby, Mon. Ap. Angl.* ii. 180. 4.
Nomada Goodeniana, *Smith, Zool.* ii. 590. 1.

Hab. Britain; France; Germany; Russia.

36. Nomada sexfasciata. B.M.

Nomada sexfasciata, *Panz. Faun. Germ.* 62. 18 ♂.
Schäff. Germ. Zeits. i. 285. 24.
St. Farg. Hym. ii. 471. 7.
Smith, Zool. ii. 593. 6 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 218. 155.
Nyland. Revis. Ap. Boreal. p. 228.
Apis Schæfferella, *Kirby, Mon. Ap. Angl.* ii. 199. 18 ♀.
Apis connexa, *Kirby, Mon. Ap. Angl.* ii. 199. 19 ♂.

Hab. Britain; France; Germany; Sweden; Russia.

37. Nomada scutellaris.

Nomada scutellaris, *St. Farg. Ency. Méth.* viii. 365. 5.

Hab. France.

38. Nomada varia. B.M.

Nomada fucata, *Panz. Faun. Germ.* 55. 19 ♀.
Fabr. Syst. Piez. p. 390. 3 ♀.
Spin. Ins. Lig. fasc. 1. 151. 1.
Schäff. Germ. Zeits. i. 284. 22.
Smith, Zool. ii. 593. 5 ♂ ♀.
Eversm. Bull. Mosc. xxv. 95. 8.
Apis varia, *Kirby, Mon. Ap. Angl.* ii. 185. 7 ♂.
Apis fucata, *Kirby, Mon. Ap. Angl.* ii. 195. 15 ♀.
Nomada varia, *Panz. Faun. Germ.* 55. 20 ♂.
Spin. Ins. Lig. fasc. 1. 152. 6.
St. Farg. Hym. ii. 489. 22 ♂; *Ency. Méth.* viii. 366. 8.
Nomada zonata, *St. Farg. Hym.* ii. 491. 23 (non *Panz.*).

Hab. Britain; France; Germany; Austria.

39. Nomada vaga.

Nomada vaga, *Panz. Faun. Germ.* 55. 22.
St. Farg. Ency. Méth. viii. 372. 34.

Hab. Austria.

40. NOMADA VERSICOLOR.

Nomada versicolor, *Panz. Faun. Germ.* 53. 22.
St. Farg. Ency. Méth. viii. 367. 12.

Hab. Austria.

41. NOMADA XANTHOSTICTA.

Apis xanthosticta, *Kirby, Mon. Ap. Angl.* ii. 212. 28 ♀.
Nomada xanthosticta, *Smith, Zool.* ii. 600. 15, and vi. 221-4.

Hab. Britain. (Coll. F. Smith.)

42. NOMADA ZONATA.

Nomada zonata, *Panz. Faun. Germ.* 53. 20.
St. Farg. Ency. Méth. viii. 371. 26.
Eversm. Bull. Mosc. xxv. 97. 12.

Hab. Austria; France; Russia.

43. NOMADA LUTEA.

Nomada lutea, *Eversm. Bull. Mosc.* xxv. 96. 10.

Hab. Russia.

44. NOMADA ORNATA.

Nomada ornata, *Eversm. Bull. Mosc.* xxv. 98. 15.

Hab. Russia.

45. NOMADA PUNCTATA.

Nomada rubra, *Eversm. Bull. Mosc.* xxv. 100. 19 (nec *Smith*).

Hab. Russia.

46. NOMADA RUBRICOSA.

Nomada rubricosa, *Eversm. Bull. Mosc.* xxv. 100. 20.

Hab. Russia.

47. NOMADA PASTORALIS.

Nomada pastoralis, *Eversm. Bull. Mosc.* xxv. 101. 21.

Hab. Russia.

48. NOMADA BIMACULATA.

Nomada bimaculata, *Eversm. Bull. Mosc.* xxv. 99. 18.

Hab. Russia.

49. Nomada dubia.

Nomada dubia, *Eversm. Bull. Mosc.* xxv. 94. 6.

Hab. Russia.

50. Nomada aberrans.

Nomada aberrans, *Eversm. Bull. Mosc.* xxv. 93. 4.

Hab. Russia.

51. Nomada flavinervis.

Nomada flavinervis, *Brullé, Exped. Sc. Morée*, iii. 344. 762; *Atlas*, pl. 49. f. 2.

Hab. The Morea.

52. Nomada tricolor. B.M.

Nomada tricolor, *Brullé, Exped. Sc. Morée*, iii. 345. 763; *Atlas*, pl. 49. f. 3.

Hab. The Morea.

53. Nomada fulvipes.

Nomada fulvipes, *Brullé, Exped. Sc. Morée*, iii. 343. 761; *Atlas*, pl. 49. f. 1.

Hab. The Morea.

54. Nomada ferruginea.

Nomada ferruginea, *St. Farg. Ency. Méth.* viii. 370. 22.

Hab. Bagdad.

55. Nomada bifasciata.

Nomada bifasciata, *St. Farg. Ency. Méth.* viii. 365. 3.

Hab. Barbary.

56. Nomada versicolor. B.M.

Female. Length $4\frac{1}{2}$ lines.—Head and thorax black, the clypeus, a quadrate spot above, the face on each side, and the entire orbits of the eyes of a reddish-yellow, the mandibles of the same colour, their apex rufo-piceous; the antennæ ferruginous, the scape having a fuscous stain behind. Thorax, the collar, tubercles, the breast, a spot beneath the wings, a broad epaulet over the tegulæ and a stripe parallel with it, the scutellum and post-scutellum, a stripe on each side of the metathorax and the legs, red. Abdomen, the basal segment black, having a transverse

red band in the middle; the second segment has a broad yellow band at the base, an angular fuscous spot in the middle, the apical portion ferruginous, darkest towards the margin; the three following segments yellow, and having a narrow ferruginous margin; the sixth segment covered with silvery pile.

Hab. North China.

57. NOMADA SOLITARIA. B.M.

Male. Length 5 lines.—Black, the clypeus and cheeks covered with silvery-white pubescence, the upper portion of the face, the vertex, and disk of the thorax clothed with yellow pubescence; the sides of the face, anterior margin of the clypeus, labrum, mandibles and scape in front yellow; the flagellum fulvous beneath. Thorax, the collar, tegulæ, tubercles and scutellum yellow; the coxæ and trochanters black; the legs otherwise yellow, excepting a black stain on the anterior and intermediate femora towards their base above, the posterior pair being black excepting at the knees; the posterior tibiæ have a dark stain within; the basal joint of the posterior tarsi black above; the wings subhyaline, their apical margins slightly clouded. Abdomen, the basal segment has a broad yellow fascia towards its apical margin, the second segment has a similar fascia much attenuated in the middle, and the three following have each a narrow fascia of the same colour, all the apical margins being fusco-ferruginous; beneath, the segments are obscurely banded in a similar manner.

Hab. Northern India. From Captain Boys' Collection.

58. NOMADA LUSCA. B.M.

Female. Length 3 lines.—Ferruginous, the antennæ as long as the head and thorax, the flagellum fuscous above. Thorax, the wings fusco-hyaline, darkest at their apical margins; the apical joints of the tarsi fuscous. Abdomen subpetiolate, the basal segment having on each side a black spot.

Hab. Philippine Islands.

59. NOMADA DECORATA.

Female. Length 4½ lines.—Head and thorax black; the anterior margin of the clypeus, sides of the face, orbits of the eyes slightly interrupted at their vertex, the labrum, mandibles and scape in front of an orange-yellow; the flagellum beneath and its apical joint ferruginous; otherwise fuscous above. The collar, tubercles, scutellum, post-scutellum, and an oblong macula on each side of the metathorax yellow, having more or less of a fer-

ruginous stain; legs yellow, varied with ferruginous; the coxæ and trochanters above, the posterior femora beneath, and the basal joint of the posterior tarsi above, black; wings subhyaline, slightly clouded at their apical margins, their nervures ferruginous. The basal segment of the abdomen black above, having a broad yellow fascia, its apical margin ferruginous; the rest of the abdomen ferruginous, each segment having a broad yellow band; that on the second segment attenuated in the middle; the fascia continued beneath the abdomen.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

60. NOMADA BIPUNCTATA.

Nomada bipunctata, *Fabr. Syst. Piez.* 392. 8.
St. Farg. Ency. Méth. viii. 369. 20.

Hab. Tranquebar.

61. NOMADA ALBO-MACULATA.

Nomada albo-maculata, *Lucas, Explo. Sc. Algér.* iii. 216. 156. pl. 10. f. 8.

Hab. Algeria.

62. NOMADA DUPLEX. B.M.

Female. Length 4½ lines.—Black, the head and thorax have a fulvous pubescence, most dense on the clypeus and sides of the metathorax, the tubercles, tegulæ, and a spot on the scutellum yellow; the wings fuscous, having an indistinct pale macula towards their apex; the coxæ and trochanters black, the femora, tibiæ and tarsi ferruginous. Abdomen black, the first, second and third segments have an oblong macula on each side, pointed within; between the two basal spots a ferruginous stain; the fourth segment has an entire fascia, and the fifth segment is entirely yellow; beneath, the four apical segments have a transverse broad yellow fascia situated posteriorly.

Hab. Tangiers.

63. NOMADA FLAVO-MACULATA. B.M.

Nomada flavo-maculata, *Lucas, Explo. Sc. Algér.* iii. 216. 154. pl. 10. f. 6.

Hab. Algeria.

64. NOMADA FUSCIPENNIS. B.M.

Nomada fuscipennis, *St. Farg. Hym.* ii. 474. 10.
Lucas, Explo. Sc. Algér. iii. 219. 160.

Hab. Algeria.

65. Nomada fenestrata.

Nomada fenestrata, *St. Farg. Hym.* ii. 476. 12.
Lucas, Explo. Sc. Algér. iii. 220. 162.

Hab. Algeria.

66. Nomada Kirbyi.

Nomada Kirbyi, *St. Farg. Hym.* ii. 485. 19.
Lucas, Explo. Sc. Algér. iii. 221. 164.

Hab. Algeria.

67. Nomada mauritanica.

Nomada mauritanica, *St. Farg. Hym.* ii. 465. 1.
Lucas, Explo. Sc. Algér. iii. 213. pl. 10. f. 2.

Hab. Algeria.

68. Nomada numida. B.M.

Nomada numida, *St. Farg. Hym.* ii. 465. 2.
Lucas, Explo. Sc. Algér. iii. 214. 150.

Hab. Algeria; South of Europe.

69. Nomada pusilla.

Nomada pusilla, *St. Farg. Hym.* ii. 466. 3.
Lucas, Explo. Sc. Algér. iii. 214. 151. pl. 10. f. 4.

Hab. Algeria.

70. Nomada parvula. B.M.

Nomada parvula, *Lucas, Explo. Sc. Algér.* iii. 215. 152. pl. 10. f. 5.

Hab. Algeria.

71. Nomada punctata. B.M.

Nomada punctata, *St. Farg. Hym.* ii. 478. 14.
Lucas, Explo. Sc. Algér. iii. 220. 165.

Hab. Algeria (Oran).

72. Nomada ruficeps.

Nomada ruficeps, *St. Farg. Hym.* ii. 475. 11.
Lucas, Explo. Sc. Algér. iii. 219. 161.

Hab. Algeria.

73. Nomada sanguinea. B.M.

Female. Length 3½ lines.—Bright red, the face and cheeks have a thin scattered silvery pubescence; the two basal segments of the flagellum above, and the eighth to the twelfth segments above fuscous, a large triangular black patch on the metathorax beneath the post-scutellum, also an oblique black stripe behind the insertion of the posterior wings; the wings fusco-hyaline, a pale macula towards their apex; the posterior tibiæ have a fuscous stain within; the posterior coxæ covered with silvery pubescence, a line of the same on each side of the metathorax; the margin of the apical segment of the abdomen fringed with silvery-white pubescence.

Hab. Algeria.

74. Nomada variabilis.

Nomada variabilis, *Lucas, Explo. Sc. Algér.* iii. 216. 155. pl. 10. f. 7.

Hab. Algeria.

75. Nomada valida. B.M.

Female. Length 4 lines.—Black, the anterior portion of the clypeus, and sometimes a dot above, the antennæ, labrum, mandibles and orbits of the eyes ferruginous; the disk of the thorax has on each side a large oblong ferruginous spot deeply notched anteriorly; the tubercles, a minute spot beneath the wings, sometimes united to a large one beneath, the scutellum and two minute spots beneath on the metathorax, ferruginous; wings subhyaline, a pale spot towards their apical margins which are clouded, their nervures pale ferruginous; the coxæ, trochanters and femora ferruginous towards their apex, the anterior pair of the latter being black merely at their extreme base; the tibiæ and tarsi ferruginous. Abdomen ferruginous, the first segment being black at the base, the apical margins of the segments having an indistinct darker stain.

Hab. Nova Scotia.

76. Nomada imbricata. B.M.

Female. Length 4½–5 lines.—Head ferruginous, a black spot above the insertion of each antenna, also a minute black dot on each side of the clypeus, above which there is sometimes a yellow spot; thorax ferruginous, the collar, tubercles, two spots on the scutellum, and an oblique line on each side of the metathorax yellow; a line down the centre of the metathorax and another oblique one on the sides of the thorax behind the wings black,

the legs ferruginous; wings slightly fuscous. Abdomen ferruginous, a yellow line or a spot on each side of the basal segment, and a broad band of the same colour on the basal margins of the three following segments, each more or less attenuated in the middle, the first usually interrupted, the fifth segment yellow.

Hab. United States.

77. NOMADA PULCHELLA.

Male. Length 3½ lines.—Black, the clypeus, labrum, mandibles and orbits of the eyes, not reaching their vertex, yellow; the scape yellow in front, the flagellum fulvous beneath. Thorax, the tubercles, tegulæ, and two spots on the scutellum yellow; legs ferruginous, the intermediate and anterior pairs yellowish in front, the posterior femora and tibiæ blackish within; the wings hyaline, faintly clouded at their apical margins, their nervures rufo-testaceous. Abdomen, the basal segment has a transverse ferruginous band, the four following segments have continuous yellow bands placed a little before the middle, the two first attenuated in the middle, the apex yellow.

Hab. North America. (Coll. F. Smith.)

78. NOMADA FERVIDA. B.M.

Female. Length 4–5 lines.—Black, the sides of the face, the clypeus, labrum, mandibles and antennæ ferruginous, the latter slightly fuscous above; the clypeus and flagellum sometimes dark fuscous. Thorax, the disk coarsely rugose, the collar, tubercles, tegulæ, a spot beneath the wings, the scutellum and post-scutellum ferruginous, the two latter sometimes have a yellowish stain; the legs ferruginous, the wings fuscous, their apical margins having a darker stain; the basal segment of the abdomen has a transverse rufo-testaceous band, sometimes bordered with yellow; the second segment has a similar band placed beyond the middle, the band more or less attenuated in the middle; the fourth segment has sometimes a transverse narrow line, and the fifth sometimes an oblique yellow dot.

Hab. St. John's Bluff, East Florida; Georgia. (E. Doubleday.)

79. NOMADA BISIGNATA. B.M.

Nomada bisignata, *Say, Append. Long's Exped. to St. Peter's Riv.* ii. 84; *Bost. Journ. Nat. Hist.* i. 402. 2.

Hab. United States.

80. NOMADA AMERICANA. B.M.

Nomada Americana, *Kirby, Faun. Boreal. Amer.* p. 269. 1. pl. 6. f. 3 ♀.

Hab. North America; Hudson's Bay.

81. NOMADA ARTICULATA. B.M.

Male. Length 3½ lines.—Black, the clypeus, labrum, mandibles, sides of the face, scape in front and flagellum towards the base yellow, the latter ferruginous towards the apex, above fuscous, the scape black above, joints of the flagellum submoniliform. The tubercles, tegulæ, scutellum and post-scutellum ferruginous, the wings hyaline, the nervures ferruginous, the apical margin of the superior wings fuscous; legs ferruginous; the coxæ and posterior femora within fusco-ferruginous; the two basal segments of the abdomen dark ferruginous, the apical ones black; a minute spot on each side of the first segment, a large ovate one, pointed within, on the second, and a transverse fascia on the four following placed about the middle, yellow; the apex ferruginous.

Hab. North America. (E. Doubleday.)

82. NOMADA ANNULATA. B.M.

Female. Length 3¼ lines.—Black, the sides of the face, orbits of the eyes, clypeus, labrum and mandibles yellow; the antennæ and a minute spot above the clypeus ferruginous. Thorax, the collar, tubercles, a spot before and a line below them, the scutellum and a patch on each side of the metathorax yellow; legs ferruginous, variegated with yellow, the wings slightly clouded on their apical margins. Abdomen slightly ferruginous towards the base, each segment having a transverse yellow band; the three basal bands more or less attenuated in the middle, the bands continued beneath the abdomen.

Male. Length 3¼ lines.—This sex has the clypeus, labrum, mandibles, scape of the antennæ in front and the flagellum beneath of a pale yellowish-white, the latter is fuscous above towards the base and again towards the apex, the intervening joints are ferruginous and the apical one entirely yellowish-white; thorax, the scutellum ferruginous; the tubercles, tegulæ, nervures of the wings reddish-yellow, the wings subhyaline, having a fuscous cloud at their apex. Abdomen black at the extreme base, the rest of the first segment and the whole of the second ferruginous, the latter having a large angulated yellow macula on each side, the first only a minute dot; each segment

from the fourth to the apical one has a narrow yellow band; beneath entirely ferruginous.

Hab. North America. (Presented by Sir Roderick Impey Murchison.)

83. NOMADA LUTEOLA.

Nomada luteola, *St. Farg. Ency. Méth.* viii. 365. 2.

Hab. Carolina.

84. NOMADA RUBICUNDA.

Nomada rubicunda, *Ency. Méth.* viii. 365. 4.

Hab. Carolina.

85. NOMADA VINCTA.

Nomada vincta, *Say, Append. Long's Exped. to St. Peter's Riv.* ii. 401. 1.

In some specimens the clypeus, labrum and mandibles are yellow.

Hab. Indiana (America).

86. NOMADA SULPHURATA. B.M.

Female. Length 5 lines.—Head of a sulphur-yellow, a black line passes forwards from the base of the antennæ half-way down the lateral margins of the clypeus, above the insertion of the antennæ is a circular black patch united to a quadrate one which occupies the vertex, a minute round yellow spot in front of the anterior stemma; the scape yellow in front, ferruginous behind and having a narrow black line, the two basal joints of the flagellum ferruginous in front, the apex of the mandibles ferruginous. The disk of the thorax black, having two central longitudinal yellow lines not extending to the collar or scutellum, both of which are also yellow; the tegulæ, and also a line which passes over them from the collar to the angles of the scutellum, a broad longitudinal patch on each side of the metathorax, the sides of the breast, tubercles and legs yellow, the latter varied with ferruginous stains; the wings fusco-hyaline, the nervures ferruginous, having a pale macula towards their apex. Abdomen black, each segment having a broad yellow fascia, the margins of which are waved; beneath a broad yellow fascia on the second segment, the following are ferruginous narrowly edged with yellow.

Hab. Georgia.

87. Nomada torrida. B.M.

Female. Length 4½ lines.—Head red, the basal joint and the flagellum of the antennæ beneath red. Thorax red, the collar obscurely yellow, the scutellum and sides of the metathorax of a paler red, the sides of the metathorax covered with white pubescence; the legs have a short silvery pile, particularly on the posterior femora, tibiæ and tarsi within; the wings fusco-hyaline, having a pale lunule towards their apex. Abdomen ferruginous, the extreme base black, also two black spots on each side of the basal segment; the third segment has on each side an oblong yellow stripe at its basal margin, the fourth has a narrow yellow fascia at its basal margin, the fifth entirely yellow.

The yellow markings on this species are in some examples very obscure.

Hab. Georgia.

88. Nomada miniata. B.M.

Female. Length 4¼ lines.—Head and antennæ red, the apex of the mandibles fuscous. The thorax and legs red, the collar, a spot in front of the tegulæ and a large macula on each side of the metathorax yellow, the latter covered with a silvery-white pubescence; two lines in the middle of the thorax, another passing over the tegulæ and the scutellum pale red; the wings hyaline, slightly fuscous at their apical margins, the nervures ferruginous. Abdomen entirely red, the second segment having on each side an ovate yellow spot; beneath immaculate.

The yellow markings on the thorax are sometimes obsolete.

Hab. Georgia.

Genus 22. EPICLOPUS.

Epiclopus, *Spin. Faun. Chili.* vi. 183.

Ocelli placed in a line on the vertex. Scutellum rounded, not toothed. The superior wings having one marginal and three submarginal cells; the third submarginal much restricted towards the marginal, receiving the second recurrent nervure a little beyond the middle; the first recurrent nervure received by the second submarginal near its apex.

1. Epiclopus Gayi.

Epiclopus Gayi, *Spin. Faun. Chili.* vi. 184. 1.

Female. Length 6 lines.—Black, the head anteriorly blue, variegated with white; the thorax above and the first and second

segments of the abdomen clothed with white pubescence, the apical segments blue.

Hab. Chili.

Genus 23. AMMOBATES.

Ammobates, *Latr. Gen. Cr. Ins.* iv. 169.

1. Ammobates rufi-ventris.

Ammobates rufi-ventris, *Latr. Gen. Cr. Ins.* iv. 169.
St. Farg. & Serv. Ency. Méth. x. 17. 1.
St. Farg. Hym. ii. 510. 1.
Blanch. Hist. Nat. des Ins. iii. 412.

Hab. Portugal.

2. Ammobates bicolor. B.M.

Ammobates bicolor, *St. Farg. & Serv. Ency. Méth.* x. 17. 2.
St. Farg. Hym. ii. 511. 2.

This species in all probability does not belong to the genus; the maxillary palpi have only four joints, in the generic characters of Latreille the number given is six;—not having a specimen of the type to examine, the present species is retained in the genus.

3. Ammobates muticus.

Ammobates muticus, *Spin. Ann. Soc. Ent. Fr.* (1843) i. 141. 29.

Hab. Spain.

4. Ammobates variegatus.

Female. Length 3½ lines.—Head ferruginous, the vertex and face as low as the insertion of the antennæ fuscous, antennæ ferruginous, the flagellum fuscous above. Thorax ferruginous, the collar, metathorax, and a stain down the middle of the disk fuscous; the wings fusco-hyaline, their apical margins having a dark cloud, the superior wings varied with hyaline spaces beyond the enclosed cells, the tegulæ and extreme base of the wings ferruginous; the disk covered with large dispersed punctures, and having a deep impressed line down the centre which also passes over the scutellum, which is consequently bituberculate; the legs red, the posterior femora having a fuscous stain above. Abdomen ferruginous, the three apical segments sub-fuscous; a short silvery pubescence clothes the face and metathorax, and is more thinly scattered on the legs and abdomen.

Hab. Greece (Thessaly). (Coll. W. W. Saunders, Esq.)

Genus 24. LEIOPODUS.

F. Smith's MSS.

The labial palpi 4-jointed, the two basal ones elongate, filiform, of about equal length, the third and fourth minute, inserted at the side of the second, near its apex. The maxillary palpi 4-jointed, the basal joint short and stout, the second more slender, twice the length of the basal one; the third rather shorter than the second, the apical one minute. The ocelli placed in a curve on the vertex. The thorax rounded, wider than the head; the superior wings having one marginal and three submarginal cells; the first submarginal cell oblique-quadrate, the second wider than the first and narrowed towards the marginal, receiving the first recurrent nervure near the apex; the third submarginal narrower than the second and slightly narrowed towards the marginal. Abdomen elongate, conical. The legs simple, the claws simple.

The general habit of this genus is that of an *Epeolus*.

1. Leiopodus lacertinus.

Female. Length 4½ lines.—Black, the pubescence on the face of a glittering yellowish-white, most sparing on the clypeus and the region of the ocelli; the labrum subquadrate, rounded at the anterior angles, deeply punctured and thinly sprinkled with similar pubescence to that on the face; the antennæ filiform, the apical joint compressed, obtuse at the apex. Thorax having a deep longitudinal depression, which passes over the scutellum; the depression broadest anteriorly; another depression on each side; the pubescence on the thorax anteriorly yellowish-white, posteriorly and beneath it is nearly white; the legs red, mottled with a white glittering pile, the tarsi fuscous; the wings subhyaline, irregularly stained with fuscous, the apical margins clouded, darkest beyond the marginal cell along the margin. Abdomen conical, the basal segment having on each side a stripe of white pubescence which is recurved upwards at the extreme lateral margins, the second and following segments have a line of white pubescence along their basal margins which recurve downwards and are produced inwardly a little way along the apical margins; beneath, covered with a similar white pile, the second and third segments having each two round denuded spots, the basal and apical segments naked.

The male exactly resembles the female, differing only in having an additional segment to the antennæ and abdomen.

The pubescence of this insect is most beautifully plumose or feathered.

Hab. South America. (Coll. W. W. Saunders, Esq.)

Genus 25. PASITES.

Nomada, pt., *Fabr. Syst. Piez.* p. 390.
Pasites, *Latr. Gen. Cr. Ins.* iv. 141.
Tiphia, pt., *Panz. Faun. Germ.* 53. 6.

1. PASITES SCHOTTII. B.M.

Pasites Schottii, *Latr. Gen. Cr. Ins.* iv. 141.
Blanch. Hist. Nat. des Ins. iii. 412.
Eversm. Bull. Mosc. xxv. 89. 1.
St. Farg. Hym. ii. 532. 1.
Pasites unicolor, *Jurine, Hym.* p. 224.
Nomada Schottii, *Fabr. Syst. Piez.* p. 394. 15.
Tiphia brevicornis, *Panz. Faun. Germ.* 53. 6.

Hab. France; Germany; Russia.

2. PASITES ATRA.

Pasites atra, *Latr. Gen. Cr. Ins.* iv. 171.
Spin. Ins. Lig. ii. t. 2. f. 7?
St. Farg. Hym. ii. 533. 2.

Hab. France; Italy.

M. Spinola has figured in plate 2 an insect which he believes to have been a *Pasites*, but as the specimen was destroyed or lost by the artist who executed the figure, there is no description of it in the work.

3. PASITES FASCIATA.

Pasites fasciata, *Eversm. Bull. Mosc.* xxv. 90. 2.

Hab. Russia.

4. PASITES DICHROA. B.M.

Male. Length 3¾ lines.—Head and thorax black, strongly punctured, the face below the insertion of the antennæ has a short glittering white pubescence, the flagellum fusco-ferruginous beneath, the labrum and mandibles ferruginous. Thorax, a longitudinal depression in the centre and a shorter one on each side opposite the tegulæ; the scutellum bituberculate; the tubercles prominent and having a fringe of white pubescence behind; the wings dark fuscous; the legs ferruginous, the coxæ black. Abdomen ferruginous.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

It is very probable that the present species may be separated from *Pasites* by a monographer of these parasitic genera, in which case we would propose the name of *Morgania*.

Genus 26. PHILEREMUS.

Epeolus, pt., *Fabr. Syst. Piez.* p. 388.
Phileremus, *Latr. Gen. Cr. Ins.* iv. 169.

1. PHILEREMUS PUNCTATUS. B.M.

Epeolus punctatus, *Fabr. Syst. Piez.* p. 389. 2.
Epeolus Kirbyanus, *Latr. Gen. Cr. Ins.* i. t. 14. f. 10.
Phileremus Kirbyanus, *Latr. Gen. Cr. Ins.* iv. p. 169.
Phileremus punctatus, *St. Farg. Ency. Méth.* x. 104. 1; *Hym.* ii. 513. 2.
Blanch. Hist. Nat. Ins. iii. 412.

Hab. France.

2. PHILEREMUS ABDOMINALIS.

Phileremus abdominalis, *Eversm. Bull. Mosc.* xxv. 88. 1.

Hab. Russia.

3. PHILEREMUS HIRSUTULUS.

Phileremus hirsutulus, *Eversm. Bull. Mosc.* xxv. 89. 2.

Hab. Russia.

4. PHILEREMUS MELECTOIDES. B.M.

Female. Length 5 lines.—Jet-black, the head and thorax strongly punctured, the face below the insertion of the antennæ thinly covered with a mixture of fuscous and griseous pubescence, the punctures large and distant on the vertex. Thorax, a central longitudinal depression on the disk, and also a slight one on each side opposite the tegulæ; a little white pubescence on each side of the metathorax at its base, also on the posterior margin of the tubercles; the tibiæ and tarsi have a short white pubescence above, that on the tibiæ intermixed with short black bristles or spines, the apical joints of the tarsi ferruginous, the pubescence on the tarsi beneath fuscous; the wings fuscous, the nervures black. Abdomen short, convex, and highly polished at the base, all the segments except the apical one have on each side a spot of snow-white pubescence, those on the basal segment round, from which each in succession is more elongate; the basal half of each segment is distantly and rather strongly punctured, the apical half finely and closely so.

Male. Exactly corresponds with the female, only being rather more pubescent.

Hab. Albania.

This insect has the wings of an *Ammobates*, but its maxillary

palpi are only two-jointed, its labial palpi being four-jointed; it might probably form a subgenus of *Ammobates*.

5. PHILEREMUS NIVEATUS.

Phileremus niveatus, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 535. 75.

Hab. Egypt.

6. PHILEREMUS ORANIENSIS.

Phileremus oraniensis, *St. Farg. Hym.* ii. 512. 1.
Lucas, Explo. Sc. Algér. iii. 209. 142. pl. 9. f. 8.

Hab. Algeria (Oran).

Genus 27. EPEOLUS.

Apis, pt., *Linn. Faun. Suec.* and *Syst. Nat.* i. 953 (1766).
Nomada, pt., *Fabr. Ent. Syst.* ii. 345 (1793).
Epeolus, *Latr. Gen. Cr. Ins.* iv. 171 (1809).

1. EPEOLUS VARIEGATUS. B.M.

Apis variegata, *Linn. Syst. Nat.* i. 957.24 ♂, and *Cab. Mus. Linn. Soc.*
Kirby, Mon. Ap. Angl. ii. 222. 36. t. 16. f. 6 ♀.
Donov. Brit. Ins. xii. 10. t. 399. f. 2.
Nomada variegata, *Fabr. Syst. Ent.* p. 389. 2; *Ent. Syst.* ii. 347. 5.
Apis muscaria, *Christ. Hym.* 195. t. 17. f. 5 ♂.
Nomada crucigera, *Panz. Faun. Germ.* 61. 20 ♂.
Epeolus variegatus, *Latr. Ins.* iii. 375.
Fabr. Syst. Piez. p. 388. 1.
Jurine, Hym. t. 14. *Supp.*
Curtis, Brit. Ent. ii. t. 516.
Blanch. Hist. Nat. Ins. iii. 412.
St. Farg. Hym. ii. 462. 2. t. 17. f. 5 ♀. 6 ♂.
Guér. Icon. R. Anim. Ins. 454. t. 74. f. 1.
Smith, Zool. iii. 1150. 1.
Nyland. Ap. Boreal. p. 174. 1.
Eversm. Bull. Mosc. xxv. 102. 3.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland; Cape of Good Hope.

Specimens of this species from the Cape of Good Hope differ merely in having the legs and tegulæ darker, the red on the scutellum reduced to two rounded spots, in every other particular they correspond with the European examples: amongst specimens from Sicily some have the abdomen red, variegated as usual: British specimens are sometimes partly red.

2. Epeolus pictus.

Epeolus pictus, *Nyland. Ap. Boreal.* p. 174. 2.

Hab. Siberia.

3. Epeolus donatus. B.M.

Epeolus donatus, *Harris, Cat.*

Female. Length 4–5½ lines.—Black, head and thorax covered with confluent punctures, the clypeus more finely punctured and interspersed with large punctures; above the clypeus the face is covered with cinereous pubescence. Thorax, a line on the collar, another over the tegulæ and passing along the base of the scutellum, two abbreviated lines on the prothorax, and one passing from the base of the wings round the metathorax over the postscutellum, of cinereous pubescence; the legs are variegated with pubescence of the same colour; wings fusco-hyaline, clearest towards their base. Abdomen very finely punctured, at its apex is a semicircular space which is rugose; the basal segment has its margins traversed by a band of cinereous pubescence, slightly interrupted in the centre of both the basal and apical margins, the three following segments have a similar band on their apical margins: the apical segment has a triangular patch on each side.

The male exactly resembles the female, differing only in the usual characteristics of the sex.

Hab. United States; Ohio (Mount Pleasant). (E. Doubleday and R. Foster.)

4. Epeolus mercatus. B.M.

Epeolus mercatus, *Fabr. Syst. Piez.* p. 389. 3.

Hab. Carolina.

5. Epeolus remigatus. B.M.

Melecta remigata, *Fabr. Syst. Piez.* p. 387. 5.

Epeolus remigatus, *St. Farg. & Serv. Ency. Méth.* x. 104. 2. *St. Farg. Hym.* ii. 461. 1.

Epeolus lunatus, *Say, App. Long's Voy. St. Peter's River* (*Keating*), p. 85.

Hab. North America; Carolina; Mexico.

This species varies in having the legs entirely red, the antennæ also are occasionally red beneath; these differences occur in the specimens from Mexico, but they cannot be considered sufficient to constitute a distinct species.

6. Epeolus scutellaris. B.M.

Epeolus scutellaris, *Say, Append. Long's Voy. St. Peter's River (Keating)*, ii. 85.

Hab. North America; Carolina; Mexico.

7. Epeolus zonatus. B.M.

Female. Length 4 lines.—Head and thorax black, the antennæ, labrum and mandibles ferruginous, the face has a little silvery pubescence. Thorax encircled with ferruginous; the collar, sides of prothorax, tegulæ and scutellum being red, the scutellum armed on each side with a short stout acute tooth; the legs ferruginous, the wings fusco-ferruginous, the nervures ferruginous. Abdomen, the two basal segments ferruginous, the apical ones black; the apical margins of the segments have fasciæ of short white pubescence, usually much interrupted; the extreme base of the abdomen black.

Male. This sex differs in having the apex of the clypeus ferruginous, and only the basal segment of the abdomen of that colour.

Hab. United States; St. John's Bluff, East Florida.

8. Epeolus fumipennis.

Epeolus fumipennis, *Say, Bost. Journ. Nat. Hist.* i. 403.

Hab. North America.

9. Epeolus Brasiliensis.

Male. Length 4½ lines.—Black, the face covered with short silvery-white pubescence, the flagellum beneath and the mandibles towards their apex ferruginous. Thorax, the disk covered with confluent punctures, a line of golden pubescence on the collar and two short ones in the middle of the prothorax uniting with the collar; the scutellum rounded behind and having on each side a stout tooth; the legs nigro-ferruginous and having a short white glittering pile, the tarsi ferruginous; the wings fuscous, and having several hyaline spots towards their apical margins. Abdomen entirely covered with a short reddish-brown pile; the basal segment has on each side near its apical margin a line of golden-coloured pubescence which curves upward along the extreme lateral margins, the curved portion white; the following segments have each a narrow golden fascia towards their apical margins, each fascia becoming broader towards the apex, covered beneath with white pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

10. Epeolus luctuosus.

Epeolus luctuosus, *Spin. Faun. Chili.* vi. 189. 3.

Female. Length 3 lines.—Antennæ black, beneath from the third to tenth joints red. Abdomen maculated; the legs black, the tibiæ having two white rings; wings hyaline, nervures black.

Hab. Chili.

11. Epeolus Gayi.

Epeolus Gayi, *Spin. Faun. Chili.* vi. 188. 2.

Female. Length 5 lines.—Black; the first and second joints of the antennæ red; the metathorax naked in the middle; abdomen, the margins of the segments having bands of pale pubescence; the legs reddish beneath.

Hab. Chili.

12. Epeolus gigas.

Epeolus gigas, *Spin. Faun. Chili.* vi. 187. 4.

Female. Length 6 lines.—Labrum, antennæ and tegulæ red; head, thorax and abdomen black, the latter having yellowish bands; the tibiæ and tarsi ferruginous; wings hyaline, nervures fuscous, the base of the wings testaceous.

Hab. Chili.

13. Epeolus tristis.

Epeolus luctuosus, *Eversm. Bull. Mosc.* xxv. 101. 1 (nec *Spin.*).

Hab. Russia.

14. Epeolus transitorius.

Epeolus transitorius, *Eversm. Bull. Mosc.* xxv. 102. 3.

Hab. Russia.

Genus 28. CŒLIOXYS.

Apis, pt., *Linn. Faun. Suec.*; *Syst. Nat.* i. 953 (1766).
Anthophora, pt., *Fabr. Syst. Piez.* 372 (1804).
Megachile, pt., *Latr. Hist. Nat.* 53. sect. 3 (1805).
Cœlioxys, *Latr. Gen. Cr. Ins.* iv. 166 (1809).

1. Cœlioxys quadridentata. B.M.

Apis quadridentata, *Linn. Faun. Suec.* 1703; *Syst. Nat.* i. 958. 29, and *Cab. Mus. Linn. Soc.* ♂.

Apis quadridentata, *Fabr. Syst. Ent.* p. 386. 49.
Panz. Faun. Germ. 55. 13.
Apis conica, *Linn. Faun. Suec.* 1705; *Syst. Nat.* i. 958. 32, and *Cab. Mus. Linn. Soc.* ♀.
Fabr. Syst. Ent. p. 387. 53.
Kirby, Mon. Ap. Angl. ii. 224. 37.
Apis bidentata, *Panz. Faun. Germ.* 59. 7?
Cœlioxys conica, *Latr. Gen. Cr. Ins.* iv. 167 ♂ ♀.
Zett. Ins. Lapp. p. 468. 1.
St. Farg. Hym. ii. 517. 1.
Nyland. Revis. Ap. Boreal. p. 278. 2.
Eversm. Bull. Mosc. xxv. 75. 1.
Cœlioxys quadridentata, *Smith, Zool.* iii. 1151. 1 ♂ ♀.
Cœlioxys umbrina, *Smith, Zool.* iii. 1153. 4. var. ♂.
Cœlioxys acuta, *Nyland. Ap. Boreal.* 250. 1. f. 10.

Hab. Britain; France; Germany; Austria; Russia; Denmark; Sweden; Finland; United States; Trenton Falls. (E. Doubleday.)

2. Cœlioxys simplex. B.M.

Cœlioxys simplex. *Nyland. Revis. Ap. Boreal.* p. 279. 6.
Cœlioxys punctata, *St. Farg.*?

Hab. Britain; France, &c.; Sweden.

3. Cœlioxys brevis.

Cœlioxys brevis, *Eversm. Bull. Mosc.* xxv. 77. 4.

Hab. Russia.

4. Cœlioxys rufescens. B.M.

Cœlioxys rufescens, *St. Farg. Hym.* ii. 519. 2.
Blanch. Hist. Nat. des Ins. iii. 413.
Smith, Zool. iii. 1152. 3.
Nyland. Revis. Ap. Boreal. p. 273. 3.
Cœlioxys hebescens, *Nyland. Ap. Boreal.* p. 251. 2.

Hab. Britain; France; Germany; Denmark; Sweden.

5. Cœlioxys apiculata. B.M.

Cœlioxys apiculata, *Nyland. Ap. Boreal.* p. 253. 4. f. 13.

Hab. Britain.

6. Cœlioxys vectis. B.M.

Cœlioxys vectis, *Curtis, Brit. Ent.* viii. tab. 349.

Cœlioxys vectis, *Smith, Zool.* iii. 1152. 2.
Cœlioxys temporalis, *Nyland. Ap. Boreal.* p. 253. 4. f. 13.
Hab. Britain; Jersey; France; Denmark; Sweden.

7. Cœlioxys lanceolata.

Cœlioxys lanceolata, *Nyland. Revis. Ap. Boreal.* p. 279. 5.
Hab. Sweden.

8. Cœlioxys tridentata.

Cœlioxys tridentata, *Nyland. Ap. Boreal.* p. 254. 5; *Revis. Ap. Boreal.* p. 278. 1.
Hab. Sweden; Finland.

9. Cœlioxys mandibularis.

Cœlioxys mandibularis, *Nyland. Ap. Boreal.* p. 252. 3.
Hab. Sweden; Finland.

10. Cœlioxys punctata.

Cœlioxys punctata, *St. Farg. Hym.* ii. 520. 3.
Hab. France (Paris).

11. Cœlioxys elongata.

Cœlioxys elongata, *St. Farg. Hym.* ii. 522. 4.
Hab. France (Paris).

12. Cœlioxys rufocaudata. B.M.

Cœlioxys octodentata, *St. Farg. Hym.* ii. 524. 6, nec *Say*.
Hab. France.

13. Cœlioxys acanthura.

Anthophora acanthura, *Illig. Mag.* v. 105. 7.
Eversm. Bull. Mosc. xxv. 76. 3.
Hab. Russia.

14. Cœlioxys conoidea.

Cœlioxys conoidea, *Illig. Mag.* v. 105. 3.
Eversm. Bull. Mosc. xxv. 76. 2.
Hab. Russia.

15. Cœlioxys farinosa. B.M.

Female. Length $5\frac{1}{4}$ lines.—Black, the flagellum, except the

basal joint and the extreme apex of the apical one, the mandibles and legs red, the face densely covered with snow-white pubescence, the entire insect as it were powdered with white scales, lines of the same traversing the collar, margins of the scutellum and epaulets of the tegulæ; the entire thorax beneath and on the sides, the legs in front and the entire abdomen beneath densely covered with white scales; the transverse bands on the abdomen above cover both the apical and basal margins of the segments, widening and uniting at the sides, the margin of the base of the abdomen has an interrupted band; the superior plate of the apical segment is short, rounded gradually at the sides to the apex, which is furnished with a short acute spine, from which a sharp carina passes forwards half-way towards the base of the segment; the ventral plate is longer than the upper one and is rounded at its apex; the abdomen is more or less red beneath, sometimes entirely so.

Hab. Turkey.

16. Cœlioxys caudata. B.M.

Cœlioxys caudata, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 535.

Hab. Egypt; Albania; South of France.

Our specimens differ slightly from the type, but not sufficiently to justify making a distinct species unless a larger number could have been examined.

17. Cœlioxys elytrura.

Cœlioxys elytrura, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 532.

Hab. Egypt.

18. Cœlioxys rufiventris.

Cœlioxys rufiventris, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 531. 73.

Hab. Egypt.

19. Cœlioxys decipiens.

Cœlioxys decipiens, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 532.
Savig. Expéd. d'Egypte, pl. 4. f. 14 ♀, 15 ♂ ♀.

Hab. Egypt.

20. Cœlioxys afra.

Cœlioxys afra, *St. Farg. Hym.* ii. 525. 7.
Lucas, Explo. Sc. Algér. iii. 210. 144. pl. 9. f. 10.

Hab. Algeria (Oran).

21. Cœlioxys argentea.

Cœlioxys argentea, *St. Farg. Hym.* ii. 523. 5.
Lucas, Explo. Sc. Algér. iii. pl. 9. f. 9.

Hab. Algeria (Oran).

22. Cœlioxys subdentata.

Male. Length 5 lines.—Black, head and thorax coarsely punctured, the punctures more or less confluent; the face and cheeks densely clothed with white pubescence. Thorax, beneath, the sides and the metathorax clothed with white pubescence; the femora beneath, and the tibiæ and tarsi above, have a clothing of very short white pubescence; the extreme apex of the tibiæ and the tarsi ferruginous; the wings fusco-hyaline, palest towards their base, darkest at their apical margins; the tegulæ and nervures black; the posterior margin of the scutellum subangular, having a short tooth in the middle and another short obtuse one on each side. Abdomen shining, the punctures scattered; the apical margins of the segments have bands of white pubescence, much attenuated in the middle, and broad on each side; beneath, the segments have a broad band of white pubescence; the apical segment has a short tooth on each side at the base, and is deeply concave in the middle, and produced on each side, each production armed above with three short teeth, beneath which is a longer and more acute tooth.

Hab. Cape of Good Hope. (Coll. F. Smith.)

23. Cœlioxys foveolata.

Male. Length 6 lines.—Black, head and thorax shining, covered with large distinct punctures, the face and cheeks densely clothed with very pale ochraceous pubescence. Thorax, the sides, beneath, and the collar covered with pale ochraceous pubescence; two tufts of the same at the base of the scutellum, its posterior margin rounded, and armed on each side with a stout angular tooth; the wings fuscous, palest at their base, the tegulæ and nervures black; the femora beneath, the tibiæ and tarsi above densely covered with short snow-white pubescence. Abdomen shining, strongly punctured, the apical margins of the segments having a narrow white fascia which at the sides expands into a broad angular patch, the second, third and fourth segments beneath have a broad band of the same colour; above, the second and third segments have on each side a transverse oblong pear-shaped foveola enclosed by a smooth shining ridge; the two following segments have on each side a somewhat similar shaped depression not enclosed; the apical segment has on each side at

the base a sharp spine; the apex above has four spines or teeth, the outer ones acute and divergent, the lower pair are about the same length, but less acute.

Hab. Cape of Good Hope. (Coll. F. Smith.)

24. Cœlioxys Capensis.

Female. Length 5 lines.—Black, head and thorax closely and coarsely punctured, the face and cheeks densely clothed with short silvery-white pubescence, the mandibles ferruginous, their tips black. Thorax, beneath, the sides and metathorax clothed with silvery-white pubescence, also a tuft over the tegulæ; the tegulæ and nervures of the wings black, the apex of the wings fuscous; the scutellum rounded behind, and armed on each side with a short stout tooth, curved inwards; the legs red, the apical joints of the tarsi black, the claws red; the femora beneath, and the tibiæ and tarsi above clothed with a short snow-white pubescence. Abdomen shining, covered with large scattered punctures, beneath, the margins of the segments and the apical segment ferruginous; all the segments have an uninterrupted white band of pubescence on their apical margins attenuated in the middle, the basal one sometimes interrupted; the apical segment acute, the upper plate having a sharp carina, not quite extending to its base, the sides of the plate fringed with white pubescence; the ventral plate longer than the superior, terminating in a short spine, subacute at its apex.

Male.—This sex closely resembles the female, but is more pubescent, particularly on the disk of the thorax, that on the face has a golden tinge; the apex of the abdomen armed with eight spines; the first pair are placed at the lateral angles of the fifth segment; the second pair at the basal lateral angles of the sixth segment, the apex of which is furnished with two on each side, the upper pair short and acute, the lower pair twice their length and more slender and acute.

Hab. Cape of Good Hope. (Coll. F. Smith.)

25. Cœlioxys verticalis. B.M.

Female. Length $5\frac{1}{2}$ lines.—Head and thorax strongly punctured, the vertex rugose; the face covered with silvery-white pubescence. Thorax, the sides and beneath have short white pubescence; the legs dark rufo-piceous, covered above with a short white pile, the tarsi ferruginous; the wings fuscous, palest towards their base; the scutellum rounded behind and having a short obtuse tooth on each side. Abdomen moderately punctured, most strongly towards the base; all the segments have a

narrow white fascia on their basal margins, which is widened laterally and is continuous beneath; the ventral plate of the apical segment a little longer than the upper plate and rounded at the apex, the upper plate terminating in a very acute spine.

Hab. Port Natal.

26. Cœlioxys carinata.

Female. Length $5\frac{1}{2}$ lines.—Head and thorax closely and strongly punctured, the face on each side covered with short white pubescence; the clypeus has a central raised carina, its anterior margin subangular. Thorax, the collar and the metathorax clothed with white pubescence; the sides, beneath, the femora beneath, and tibiæ and tarsi above, covered with a very short white pile; the apical joints of the tarsi rufo-testaceous; the wings dark fuscous, the superior wings paler towards their base; the inferior wings have their basal half hyaline; the scutellum is rounded behind and armed on each side with an angular tooth. Abdomen shining, strongly punctured, the margins of all the segments have a narrow white fascia which expands laterally into broad patches; the abdomen is rounded at the sides, the sixth segment being suddenly narrowed, forming an elongate acute spine, the lower plate rather longer than the upper, which has an elevated carina towards its apex, on each side of which it is rugose.

Hab. Port Natal. (Coll. W. W. Saunders, Esq.)

27. Cœlioxys torrida. B.M.

Female. Length 8 lines.—Black, head and thorax very closely and finely punctured, an elevated carina passing from the anterior stemma to the base of the clypeus, channeled above; the face on each side covered with white pubescence, that on the clypeus very short and fuscous towards the anterior margin. Thorax, a delicate impressed line down the centre extending to the base of the scutellum, the punctures on the disk confluent running into striæ; a line of white pubescence on the collar, another over the tegulæ, a third along the base of the scutellum; the metathorax covered and having a tuft on each side, another on the tubercles, and the whole thorax beneath thinly covered with short pubescence of the same colour; the legs are covered with a short white pile most dense and glittering above; the wings at their base hyaline, their apical half dark fuscous having a purple lustre; the scutellum rounded behind and armed laterally with stout curved tooth. Abdomen elongate, the apical segment long and spiniform; on each side of the basal segment a patch of snow-

white pubescence notched within, a narrow line on the basal margins of the following segments expanding laterally into a broader fascia equally covering apical and basal margins; the second and third segments have towards their base laterally a short curved line of white pubescence; the whole abdomen finely punctured, most strongly so towards the base; the apical segment beneath impunctate, except a few delicate punctures at the base.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

28. Cœlioxys aurifrons. B.M.

Female. Length 3½ lines.—Black; head and thorax very coarsely punctured, the face densely covered with golden pubescence. Thorax, the wings subhyaline, darkest towards their apical margins, the tegulæ and nervures rufo-testaceous; the legs red; the femora beneath, and the tibiæ and tarsi above, covered with a short white pile; the sides of the metathorax covered with white pubescence; the scutellum slightly rounded behind, and armed on each side with a stout bent tooth. Abdomen shining, covered with scattered punctures, most strongly so towards the base; all the segments have a narrow fascia of white pubescence on their apical margins, more or less interrupted in the centre; each segment has at the sides towards the base an impressed line; the apical segment is armed on each side with an acute spine, and with four at the apex all acute, the two lower spines being longer than the upper ones; beneath the abdomen is ferruginous at the base, and at the apex of the other segments.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

29. Cœlioxys pruinosa.

Male. Length 3 lines.—Black, head and thorax coarsely punctured, the former very large, wider than the thorax, the face densely clothed with a pale golden pubescence, that on the cheeks being snow-white; the antennæ rufo-testaceous beneath, the mandibles ferruginous, on the cheeks beneath is a deep smooth shining ovate fossulet. Thorax beneath, also the legs beneath, covered with a dense short white pile having the appearance of hoar-frost, the tarsi ferruginous; the apex of the wings fuscous, hyaline towards their base, the tegulæ and nervures black; a band of white pubescence on the collar, an epaulet of the same over the tegulæ, and a line at the base of the scutellum, the posterior margin of the latter rounded, and armed on each side with a large angular bent tooth. Abdomen shining, rather closely punctured; the apical margins have an interrupted white

band, broad and almost uniting at the sides, but much attenuated inwardly; the third, fourth and fifth segments at their basal margins have a transverse interrupted narrow band; the apical segment subquadrate, the apex ferruginous; on each side towards the base a short acute tooth, the apex having four short acute teeth above, and two below rather longer but less acute.

Hab. The Gambia. (Coll. F. Smith.)

30. Cœlioxys loricula.

Male. Length 5 lines.—Black, head and thorax coarsely punctured, the face covered with a golden pubescence, and a narrow line of white behind the eyes. Thorax, the disk covered with large oblong punctures, those on the scutellum finer, close and rounded, the posterior margin rounded, armed on each side with a stout acute tooth; the wings fuscous, palest towards their base, the tegulæ and nervures black, the thorax beneath covered with a short dense silvery-white pubescence, the femora beneath and the tibiæ and tarsi above clothed with the same. Abdomen shining, the basal segment covered with scattered punctures, a few at the base and apex of the following; the basal segment has laterally a short marginal fascia, and the apical margins of the following segments a very narrow fascia slightly widening laterally; the apical segment armed on each side with a short acute tooth, and with four at the apex, the upper pair rounded at their apex, the inferior pair longest and subacute.

Hab. Guinea. (Coll. W. W. Saunders, Esq.)

31. Cœlioxys fuscipennis.

Female. Length 5 lines.—Black, the head and thorax strongly punctured, the sides of the face and cheeks densely covered with snow-white pubescence, the clypeus thinly covered. Thorax, a spot behind the wings, the metathorax on the sides, and a large patch beneath the wings of white pubescence; the femora beneath and the tibiæ and tarsi above have a covering of very short white pubescence, the legs rufo-testaceous, wings dark fuscous, subhyaline towards their base, the nervures black, the scutellum behind rounded and armed on each side with a short blunt tooth diverging outwards. Abdomen shining, the basal segment strongly and closely punctured, the punctures scattered on the other segments; the apical one very finely punctured; the segments have very narrow white marginal bands widened at the sides; beneath, they are narrow and interrupted in the middle; the superior plate of the apical segment is carinated in the middle and acute

at the apex; the ventral plate is longer than the upper one and gradually narrows to an acute point.

Hab. India. (Coll. J. S. Baly, Esq.)

32. Cœlioxys ducalis, n. s.

Female. Length 11 lines.—Black, the head clothed with a dense short bright fulvous pubescence, that on the cheeks is fuscous; the thorax above rugose, and having a slightly elevated carina passing from the collar to the middle of the scutellum, on each side of which is a bent tooth; the wings dark fuscous, having a splendid purple and coppery reflection, the posterior wing hyaline towards the base. The abdomen is strongly punctured, most sparingly so on the disk; the apical segment finely punctured.

Hab. India? (Coll. W. W. L. Walcott, Esq.)

33. Cœlioxys apicata.

Female. Length 5½–6 lines.—Black, head and thorax strongly but not coarsely punctured, the face clothed with short white pubescence; that on the cheeks, vertex, collar, sides of the thorax, and metathorax, is also white; the wings subhyaline, their apex clouded, the scutellum rounded behind and subdentate on each side. Abdomen shining, towards the base rather distantly punctured, more finely and closely so towards the apex; the superior plate of the apical segment broad and rounded at the apex, slightly notched at the sides, carinated down the centre and terminating in a slender acute spine; the inferior plate a little longer than the upper one, very broad and rounded at the apex.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

34. Cœlioxys capitata. B.M.

Female. Length 3 lines.—Head very large, and as well as the thorax, coarsely punctured; the face and cheeks covered with snow-white pubescence, antennæ beneath rufo-testaceous, tips of the mandibles ferruginous. Thorax, two spots on the prothorax, one over the tegulæ and two on the basal margin of the scutellum of white scales; the thorax on the sides and beneath, the femora beneath, and tibiæ and tarsi above, also covered with white scales, the legs ferruginous; the wings fusco-hyaline, darkest towards their apical margins, the nervures fusco-ferruginous; the scutellum rounded behind and armed on each side with a short stout tooth. Abdomen shining, the punctures distinct but scattered, most dense at the base; all the segments

have a marginal fascia of snow-white scales; in the centre the bands are formed of single scales placed longitudinally, at the sides the bands are much widened and are continued beneath, both above and below usually more or less interrupted; the abdomen is rufo-testaceous beneath; the superior plate of the apical segment gradually narrows to a point, has a short carina towards the apex, and a white spot on each side about the middle; the lower plate is nearly twice the length of the upper, gradually tapering and notched at its apex.

The male only differs in the apical segment of the abdomen which is armed with eight spines, a short acute one on each side at the base, four short acute ones in a row at the apex above, and two longer ones beneath; there is also a very minute one on the apical margins of the fifth segment at its extreme lateral angles.

Hab. Northern India; North Bengal; Ceylon.

35. Cœlioxys vidua.

Female. Length 4¼ lines.—Black, the face covered with very short pale ochraceous pubescence, the mandibles and scape of the antennæ ferruginous. Thorax, a line on the collar, an epaulet over the tegulæ, and a line at the base of the scutellum of ochraceous pubescence; the legs red, the tibiæ and tarsi above, and femora beneath covered with a short white pile; the scutellum produced in the middle into an angular tooth, and armed on each side with a stout tooth; the disk covered with large distinct punctures, the tegulæ red, the apex of the wings fuscous. Abdomen, the first segment above, the second and third laterally, and the whole beneath red; all the segments margined with pale ochraceous bands, continuous beneath; the superior plate of the anal segments rounded at its extremity and having a central carina extending nearly to its base; the inferior plate a little longer than the superior one, its apex terminating in a broad acute tooth, on each side of which it is notched, forming two short acute teeth.

Hab. Brazil. (Coll. F. Smith.)

36. Cœlioxys carinata.

Female. Length 5 lines.—Black, the face on each side densely covered with short yellowish-white pubescence, the mandibles ferruginous, their tips black. The thorax shining on the disk, nearly impunctate anteriorly, becoming deeply punctured towards the scutellum, the punctures large and not very close, the scutellum punctured on each side, its posterior margin angular, ferruginous at the point; on each side is a stout tooth; the tegulæ ferruginous, the wings subhyaline, gradually becoming

fuscous towards their apical margins, the nervures dark ferruginous; the legs, abdomen beneath and base above, ferruginous; the abdomen shining, punctured at the base, and on the basal margins of the segments laterally; otherwise, the punctures widely scattered; an indistinct carina runs down the middle of the abdomen, becoming raised and decided on the apical segment, the upper plate of which is a little shorter than the lower one, which is acute at the apex and slightly notched on each side; beneath, the abdomen has a similar undefined carina down the centre.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

37. Cœlioxys similllima. B.M.

Female. Length 4¼ lines.—Very similar to *C. tridentata*, but the scape is entirely black, the thorax is not produced in the middle, the anal valve has the inferior plate produced into a more elongate spine and is not notched at the sides; in other respects it corresponds with that species, of which it possibly may be a mere variety; the male is not known; it may also be a variety of the *prætexta* of Haliday, but the description of that species is too short to be at all relied upon in this variable genus.

Hab. Brazil.

38. Cœlioxys lævigata. B.M.

Male. Length 4½ lines.—Black, very smooth and shining; on the head and thorax the punctures are large and scattered, on the abdomen they are finer and cover the basal segment, and the base of all the following, a transverse line towards the margins of each, the intervening portions being smooth and shining; the face covered with very pale fulvous pubescence; the tegulæ and legs bright ferruginous; the wings subhyaline, their apical margins have a fuscous cloud, as well as the upper half of the marginal cell; the nervures black; the scutellum impunctate, produced in the middle into a broad spine, which is rounded at its apex; on each side an elongate smooth spine; the apical segment of the abdomen armed with six acute spines, one on each side about the middle; four at the apex, two on each side, of which the two lower spines are the longest; all the segments have a narrow white marginal fascia a little widened at the sides and beneath, and more or less interrupted above; the apical margins of the ventral segments ferruginous.

Hab. Para.

39. Cœlioxys zonula. B.M.

Female. Length 6–7½ lines.—Head and thorax black, the

head densely clothed with a short scale-like pubescence, the vertex naked; a transverse line of fuscous pubescence on the face, in a line with the anterior stemma; the disk of the thorax coarsely punctured, the scutellum rugose, having on each side a stout tooth; a continuous line of whitish pubescence passes over the collar, tegulæ, and base of the scutellum; the thorax on the sides and beneath covered with a very short snow-white pubescence; the legs red, and having behind a line of snow-white pubescence; the tegulæ red, the wings fusco-hyaline, their apical margins fuscous, a narrow cloud passing along the superior margin of the marginal cell; the nervures dark fuscous. Abdomen, the three basal segments red, and, except the apical segments, entirely red beneath; all the margins of the segments have a narrow fringe of short snow-white pubescence; a broad patch of the same in the middle of the basal ventral segment; the superior plate of the apical segment pointed, and having a central carina fringed with fuscous pubescence; the ventral plate longer than the superior, acute at the apex, having a fringe of dark fuscous pubescence on the sides.

Male.—This sex closely resembles the female, the apical segment denticulate, a short tooth on each side, the apex being quadridentate, the lower pair of teeth longest and acute.

Hab. Brazil (Santarem).

40. Cœlioxys rufopicta.

Male. Length 6¼ lines.—Black, the vertex of the head coarsely punctured, the face covered with a pale golden-yellow pubescence, the mandibles ferruginous in the middle. Thorax shining, sparingly punctured in the centre, but more thickly and strongly at the sides; the prothorax elevated, the scutellum smooth and shining, having on each side a few large punctures, its posterior margin slightly produced in the middle and armed on each side with an obtuse tooth diverging outwards; the wings fusco-hyaline, having irregular transparent spaces; the legs ferruginous, the femora being more or less fuscous. Abdomen elongate, rather strongly punctured at the base, but much more finely towards the apex; a bright ferruginous spot on each side of the basal segment, the apical margins of the segments beneath, ferruginous; all the margins have a narrow marginal fascia, more or less interrupted above; the ventral segments have a central carina which extends from the base to the apex of the fourth segment; at its termination are two short acute spines; the apex armed with six teeth, a short acute one on each side,

and two pairs at the apex, of which the upper ones are very short and acute.

Hab. South America. (Coll. W. W. Saunders, Esq.)

41. Cœlioxys Cayennensis.

Cœlioxys Cayennensis, *Spin. Ann. Soc. Ent. Fr.* x. (1841) 144. 95; *Faun. Chili.* vi. 190. 1.

Hab. Cayenne. (Coll. W. W. Saunders, Esq.)

42. Cœlioxys prætexta.

Cœlioxys prætexta, *Halid. Linn. Trans.* xvii. 320. 15 (1837).

Hab. St. Catherine's. (Coll. W. W. Saunders, Esq.)

43. Cœlioxys abdominalis. B.M.

Cœlioxys abdominalis, *Guér. Icon. Règ. Anim. Ins.* 453.

Hab. Isle of St. Thomas.

44. Cœlioxys rufipes.

Cœlioxys rufipes, *Guér. Icon. Règ. Anim. Ins.* 452. tab. 73. f. 9.

Hab. Cuba.

45. Cœlioxys modesta. B.M.

Female. Length 4½ lines.—Black, head and thorax covered with large distinct punctures, the face covered with white pubescence. Thorax, a line on the collar, a spot behind the tegulæ, and a line at the base of the scutellum of white pubescence; the sides of the metathorax have some long white hairs, and the legs above are covered with very short white pubescence, the legs rufo-testaceous, as well as the tegulæ and nervures of the wings, the latter fusco-hyaline, darkest towards their apical margins; the scutellum rounded behind and armed on each side with a short bent tooth. Abdomen shining, the punctures scattered, all the segments have fasciæ of white pubescence, frequently interrupted; the apical segment has the lower plate broad, rounded at the apex, and having a minute point in the middle, the margins of the plate fringed with fuscous pubescence.

Hab. United States.

46. Cœlioxys rufitarsus. B.M.

Male. Length 5¼ lines.—Black, the head and thorax coarsely punctured, the face covered with white pubescence, the cheeks and the thorax beneath have a long white pubescence as well as

the sides of the metathorax, the tegulæ testaceous in the middle, the wings subhyaline, their nervures ferruginous, all the tarsi bright ferruginous; the apical margins of all the segments have a white marginal fascia; the fifth segment has on its apical margin laterally a short blunt tooth, the sixth has a more acute one on each side in the middle, the apex having four teeth, placed two above and two beneath, the latter being the longest and most acute.

Hab. United States.

47. Cœlioxys 8-dentata. B.M.

Cœlioxys 8-dentata, *Say*, *Keating's Voy. St. Peter's Riv. App.* 84; *Bost. Journ. Nat. Hist.* i. 400. 1.

Hab. N. America (N.W. Arkansas; Pennsylvania).

48. Cœlioxys alternata.

Cœlioxys alternata, *Say*, *Bost. Journ. Nat. Hist.* i. 401. 2.

Hab. N. America (Indiana).

49. Cœlioxys dubitata. B.M.

Female. Length 5¼ lines.—This insect exactly resembles *C. rufitarsus*, differing, as usual in the sex, in having the abdomen conical; the upper plate of the apical segment being suddenly narrowed at half its length, forming on each side a sharp angle, from which it gradually narrows to the apex, which is subacute; the lower plate is lanceolate, very slightly notched on each side towards the apex.

Hab. St. John's Bluff, East Florida. (R. Foster, Esq.)

50. Cœlioxys funeraria. B.M.

Male. Length 5 lines.—Black, head and thorax strongly and very closely punctured, the face covered with snow-white pubescence; the thorax has some long white pubescence on the collar, metathorax beneath, and on the sides; wings subhyaline, the nervures ferruginous, the tarsi ferruginous; the scutellum rounded at its posterior margin and armed on each side with a short bent tooth. Abdomen shining, closely and rather strongly punctured; all the segments have a snow-white band on their apical margins, which is narrow in the middle and gradually widened towards the lateral margins and continued uninterruptedly on the ventral segments; the apex armed with six teeth, placed one on each side, and four at the apex placed two above and two below, the lower pair longest and acute.

Hab. Canada.

This species closely resembles the *C. vectis*, but differs in having snow-white pubescence on the face, continuous bands on the abdomen, and also in wanting the transverse depressions on each segment; the fifth segment also is not produced at its apical lateral margins.

Genus 29. DIOXYS.

Trachusa, pt., *Jurine, Hym.* p. 253.
Heriades, pt., *Spin. Ins. Lig.* fasc. 3. p. 198.
Dioxys, *St. Farg. & Serv. Ency. Méth.* x. 109.

1. Dioxys cincta.

Trachusa cincta, *Jurine, Hym.* p. 253. t. 12. f. 36.
Heriades cincta, *Spin. Ins. Lig.* fasc. 3. p. 198. 2.
Dioxys cincta, *St. Farg. & Serv. Ency. Méth.* x. 109. 1.
St. Farg. Hym. ii. 514. 2.

Hab. South of France; Italy.

2. Dioxys Pyrenaica.

Dioxys Pyrenaica, *St. Farg. Hym.* ii. 515. 3.
Lucas, Explo. Sc. Algér. iii. 206. 138.

Hab. The Pyrenees (Baréges); Algeria (Oran).

3. Dioxys rufiventris. B.M.

Dioxys rufiventris, *St. Farg. Hym.* ii. 516. 4.
Lucas, Explo. Sc. Algér. iii. 207. 139. t. 9. f. 5.

Hab. Algeria (Oran).

4. Dioxys maura.

Dioxys maura, *St. Farg. Hym.* ii. 516. 5.
Lucas, Explo. Sc. Algér. iii. 208. 141. t. 9. f. 7.

Hab. Algeria (Oran).

5. Dioxys dimidiata.

Dioxys dimidiata, *St. Farg. Hym.* ii. 514. 1.

Hab. Versailles.

6. Dioxys chalicoda. B.M.

Dioxys chalicoda, *Lucas, Explo. Sc. Algér.* iii. 207. 140. t. 9. f. 6.

Hab. Algeria (Oran).

Genus 30. STELIS.

Apis, pt., *Kirby, Mon. Ap. Angl.* i. 154 (1802).
Megilla, pt., *Fabr. Syst. Piez.* p. 328 (1804).
Megachile, pt., *Latr. Hist. Nat.* xiv. 51 (1805).
Stelis, *Panz. Krit. Revis.* ii. (1806).
Latr. Gen. Cr. Ins. iv. 163 (1806).
Trachusa, pt., *Jurine, Hym.* (1807).
Gyrodroma, *Klug, Illig. Mag.* vi. (1807).

1. STELIS ATERRIMA. B.M.

Apis aterrima, *Panz. Faun. Germ.* 56. 15.
Apis punctulatissima, *Kirby, Mon. Ap. Angl.* ii. 231. 39. t. 16. f. 9.
Megilla aterrima, *Fabr. Syst. Piez.* p. 331. 15.
Megachile punctatissima, *Latr. Hist. Nat.* xiv. 54.
Spin. Ins. Lig. fasc. 1. p. 135. 3.
Trachusa aterrima, *Jurine, Hym.* p. 253.
Stelis aterrima, *Panz. Krit. Revis.* ii.
Latr. Gen. Cr. Ins. iv. 163.
Blanch. Hist. Nat. Ins. iii. 413.
St. Farg. Hym. ii. 527. 1.
Smith, Zool. iii. 1154. 1.
Nyland. Ap. Boreal. i. 274. 1.
Eversm. Bull. Mosc. xxv. 86. 1.
Gyrodroma aterrima, *Klug, Illig. Mag.* vi. 225.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

2. STELIS PHÆOPTERA. B.M.

Apis phæoptera, *Kirby, Mon. Ap. Angl.* ii. 232. 40.
Megachile phæoptera, *Latr. Hist. Nat.* xiv. 54. 6.
Spin. Ins. Lig. fasc. 1. p. 136. 4.
Stelis phæoptera, *St. Farg. Hym.* ii. 527. 2.
Smith, Zool. iii. 1154. 2.
Nyland. Ap. Boreal. 274. 1.
Eversm. Bull. Mosc. xxv. 87. 2.

Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland.

3. STELIS MINUTA. B.M.

Stelis minuta, *St. Farg. Ency. Méth.* x. 481. 1; *Hym.* ii. 529. 3 ♀.
Dufour, Ann. Soc. Ent. Fr. ix. 34 (1840).
Smith, Zool. iii. 1155. 4.

Hab. Britain; France.

4. Stelis breviuscula.

Stelis breviuscula, *Nyland. Ap. Boreal. Supp.* p. 106.

Hab. Sweden.

5. Stelis 8-maculata.

Stelis octomaculata, *Smith, Zool.* iii. 1155. 3 ♂ ♀.
Stelis ornatula, *Nyland. Ap. Boreal. Supp.* p. 106.

Hab. Britain; Sweden.

6. Stelis aberrans.

Stelis aberrans, *Eversm. Bull. Mosc.* xxv. 87. 3.

Hab. Russia.

7. Stelis obesa.

Stelis obesa, *Say, Bost. Journ. Nat. Hist.* i. 398.

Hab. North America (Indiana, United States).

8. Stelis fœderalis. B.M.

Female. Length 2½ lines.—Black, the face covered with griseous pubescence, the flagellum rufo-piceous; the thorax as well as the head strongly punctured, the former has a scattered griseous pubescence, the wings fusco-hyaline, the apical margins of the wings faintly clouded, the apical joints of the tarsi dark ferruginous. Abdomen ovate, shining and closely punctured, the basal segment having on each side a somewhat pear-shaped yellowish-white macula; the four following segments have across the middle a slightly interrupted narrow fascia, the sixth immaculate, its margin entire, rounded.

Male.—Closely resembling the female, the face being more densely pubescent; the five basal segments of the abdomen having a subinterrupted fascia of the same colour as in the female, the fasciæ on each side are situated on their inferior margins; the apical segment rounded.

Hab. United States.

9. Stelis carbonaria. B.M.

Female. Length 4 lines.—Black, closely and strongly punctured, the head and thorax opake; the abdomen shining, more finely and distantly punctured, the face covered with white pubescence; wings dark fuscous, palest towards their base; the scutellum rounded, and produced behind over the base of the abdomen and covered with large punctures; in the middle of the

posterior margin a deep depression. Abdomen curved, and having a scattered griseous pubescence, the apex rounded.

The male resembles the female, but has the apical segment of the abdomen tridentate.

Hab. East Indies; N. Bengal; Ceylon.

Genus 31. CROCISA.

Nomada, pt., *Fabr. Ent. Syst.* ii. 345 (1793).
Melecta, pt., *Fabr. Syst. Piez.* p. 385 (1804).
Crocisa, *Jurine, Hym.* p. 239 (1807).

The mentum and labrum of about equal length; the labial palpi five-jointed; the basal joint elongate, full half the length of the mentum, the second not half the length of the basal joint, the third about half the length of the second; the two apical joints minute, placed near the apex of the third; the paraglossæ elongate, slender, rather longer than the basal joint of the labial palpi. Maxillary palpi two-jointed. The superior wings having one marginal and three submarginal cells, the second restricted towards the marginal, receiving the first recurrent nervure a little beyond the middle, the third receiving the second recurrent nervure at its apex.

Type. *Crocisa histrio.*

1. CROCISA HISTRIO. B.M.

Nomada histrio, *Fabr. Ent. Syst.* ii. 345. 1.
Melecta histrio, *Latr. Hist. Nat. Ins.* iii.
Fabr. Syst. Piez. p. 385. 1.
Spin. Ins. Lig. fasc. 1. p. 153. 1.
Crocisa histrio, *Latr. Gen. Cr. Ins.* iv. 172.
St. Farg. Hym. ii. 454. 1.
Lucas, Hist. Nat. des Ins. iii. 411.
Eversm. Bull. Mosc. xxv. 104. 1.

Hab. India; France; Russia; Algeria.

2. CROCISA SCUTELLARIS. B.M.

Nomada scutellaris, *Fabr. Ent. Syst.* ii. 346. 2.
Panz. Faun. Germ. 32. 7.
Melecta scutellaris, *Fabr. Syst. Piez.* p. 387. 4.
Spin. Ins. Lig. fasc. 1. p. 153. 2.
Melecta histrionica, *Illig. Mag.*?
Crocisa histrionica, *Latr. Gen. Crust. Ins.* iv. 172.
Crocisa scutellaris, *St. Farg. Hym.* ii. 453. 7.

Hab. France; Germany; Italy; Spain; Albania; Siberia; Turkey; Ceylon; Africa.

3. Crocisa nitidula. B.M.

Melecta nitidula, *Fabr. Syst. Piez.* p. 386. 2.
Crocisa nitidula, *Latr. Gen. Crust. Ins.* iv. 172.
St. Farg. Hym. ii. 448. 1.
Crocisa pulchella, *Guér. Icon. Règ. Anim.* p. 454. t. 74.

Hab. Amboina; New Holland (Richmond River).

4. Crocisa splendidula. B.M.

Crocisa splendidula, *St. Farg. Hym.* ii. 449. 2.

Hab. South Africa.

5. Crocisa emarginata. B.M.

Crocisa emarginata, *St. Farg. Hym.* ii. 449. 3.

Hab. Port Natal.

6. Crocisa lamprosoma. B.M.

Crocisa lamprosoma, *Boisd. Voy. de l'Astr.* p. 653. t. 12. f. 4.
Crocisa Novæ-Hollandiæ, *St. Farg. Hym.* ii. 450. 4.

Hab. Vanikoro? Hunter River, Australia.

7. Crocisa ramosa. B.M.

Crocisa ramosa, *St. Farg. Hym.* ii. 451. 5.
Brullé, Hist. Nat. Il. Canar. ii. 89. 40.
Lucas, Explo. Sc. Algér. iii. 212. t. 10. f. 1.
Crocisa orbata, *St. Farg. Hym.* ii. 452. 6 (var.?).

Hab. France; Albania; Canary Islands; Algeria.

8. Crocisa decora. B.M.

Crocisa decora, *Smith, Trans. Ent. Soc.* new ser. ii. p. 41.

Hab. North China. (R. Fortune, Esq.)

9. Crocisa picta. B.M.

Female. Length 7 lines.—Black, the face and cheeks covered with a pale blue pubescence; the margin of the vertex has a fringe of pale blue pubescence, and the thorax an interrupted line on the collar; a round spot on each side of the scutellum at its base, a line on the prothorax reaching the middle of the disk, and a round spot on each side of bright blue pubescence; a large spot of the same beneath the wings, a smaller one on the breast, and all the tibiæ and tarsi covered with pubescence of the same colour; the wings dark fuscous and having a violet irides-

cence, subhyaline towards their base; sometimes a spot of blue pubescence on the scutellum at its notch in the middle. Abdomen, a large subquadrate spot on each side at the base, emitting a short line from its apex within; the four following segments have on each side a broad line of blue pubescence; beneath, the second, third, and sometimes the fourth segments have a small spot on each side of similar pubescence.

Hab. Port Natal.

Genus 32. LIOGASTRA.

Liogastra, *Perty, Delec. Anim. Art.* p. 146.
Rathymus, *St. Farg. Hym.* ii. 539.

The labial palpi four-jointed; the first joint about the same length as the mentum, the second joint rather more than half the length of the first; the two apical joints minute, placed at the side of the second joint nearly at its apex. The maxillary palpi obsolete; the mentum half the length of the labium; the paraglossæ short, acute at their apex, narrowed at their base. The superior wings having one marginal and three submarginal cells; the former as long as the three latter, rounded at its apex; the first submarginal cell a little longer than the second; the second and third of about equal length, the latter narrowed considerably towards the marginal; the two recurrent nervures uniting with the second and third transverse cubital nervures; the antennæ filiform, the scape short, much narrowed at the base, the ocelli placed in a slight curve on the vertex; the calcaria and claws of the tarsi simple.

1. LIOGASTRA BICOLOR. B.M.

Liogastra bicolor, *Perty, Del. An. Art.* p. 147. t. 28. f. 7.
Rathymus bicolor, *St. Farg. Hym.* ii. 540. 1.

Hab. Brazil.

2. LIOGASTRA UNICOLOR. B.M.

Female. Length 8 lines.—Ferruginous, antennæ black, except the scape and two basal joints of the flagellum, which are ferruginous; the face, margin of the vertex and legs have a changeable golden pubescence; the collar and sides of the metathorax have a line of white pubescence; the scutellum elevated, bituberculate; the intermediate tibiæ at their apex above produced into a short acute spine; wings dark fuscous, having a violet iridescence; the legs of a paler red than the body.

Hab. Brazil (Para). (H. W. Bates.)

3. Liogastra atra. B.M.

Male. Length 8 lines.—Black, the second joint of the flagellum rufo-testaceous; the sides of the face covered with fuscous pubescence; the wings fusco-hyaline; the scutellum elevated, bituberculate; the disk of the thorax covered with short velvety pubescence. Abdomen naked above, except the sides of the three apical segments, which are clothed with fusco-ferruginous pubescence; the abdomen has a slight blue tinge at its base.

Hab. Brazil (Para). (H. W. Bates.)

Genus 33. EURYTIS, n. g.

(*F. Smith's MSS.*)

The labial palpi four-jointed, the first joint more than twice the length of the second, the two apical ones very minute; the maxillary palpi consisting of a single joint; the ocelli placed in a line on the vertex, the antennæ filiform. The superior wings having one marginal and three submarginal cells; the former equal in length to the three latter, the second slightly narrowed towards the marginal, the third curved and of equal width; the two recurrent nervures uniting with the second and third transverse cubital nervures; the calcar of the intermediate tibiæ elongate, very stout and denticulate at its apex. Destitute of pollinigerous organs.

1. Eurytis funereus. B.M.

Female. Length 7 lines.—Black, entirely clothed with short velvety pubescence; wings of a purple-black. The calcar of the intermediate tibiæ elongate, bidentate at its apex; the calcar is rounded exteriorly and flattened beneath, the edges finely serrated; the calcaria on the posterior tibiæ are also flattened beneath and the edges serrated. Abdomen acute at its apex, the pubescence having a gloss similar to velvet, of a somewhat bluish tinge, the apical segment beneath having a central longitudinal carina.

Hab. Brazil (Santarem). (H. W. Bates.)

Genus 34. MELISSA, n. g.

(*F. Smith's MSS.*)

The labium rather more than twice the length of the mentum, which is rounded at the base and trifid at the apex; the paraglossæ short, lanceolate; the labial palpi four-jointed, the first

joint more than twice the length of the second, the two apical joints minute. The maxillary palpi three-jointed, the basal joint minute, the second twice the length of the third. The antennæ filiform, the ocelli placed in a line on the vertex. The anterior wings having one marginal and three submarginal cells, the second submarginal much contracted towards the marginal, the third slightly so. The calcaria of the intermediate tibiæ enlarged, forming stout spines which are denticulate at their apex; the anterior tibiæ have their calcaria bifid.

1. Melissa rufipes. B.M.

Crocisa rufipes, *Perty, Del. An. Art.* p. 149. t. 28. f. 10 ♂.
Mesocheira azurea, *St. Farg. et Serv. Ency. Méth.* x. 106. 2.
Mesoplia azurea, *St. Farg. Hym.* ii. 457. 1.

Hab. Brazil (Para); Jamaica.

2. Melissa decorata. B.M.

Female. Length 6 lines.—Head and thorax black, splendidly decorated with glittering pubescence (or scales) of a vivid green colour on the vertex, clypeus, disk of the thorax, tegulæ, tubercles and a spot beneath them, also on the legs above; the face on each side, and the head behind, covered with white pubescence; the white has a yellow tinge towards the vertex of the eyes; the collar, sides of the thorax and metathorax, the anterior tibiæ in front, a line from the collar to the middle of the disk, a round tuft on each side, and an epaulet over the tegulæ, of short dense white pubescence; on the scutellum are two elevated conical tubercles; the wings subhyaline, the nervures black, the tips of the wings have a dark fuscous cloud; the calcaria on the intermediate tibiæ bifurcate at their apex, the anterior spine has two sharp teeth within. Abdomen, of a dark blue, changing to black in certain lights, the apical margin of each segment having a broad band of pale glittering blue-green, the bands formed of minute scales as in the Lepidoptera; the segments have at their extreme lateral margins a spot of silvery-white pubescence; the entire insect beneath of dark purple-black, the abdomen being naked.

Hab. Brazil. (H. W. Bates.)

3. Melissa regalis. B.M.

Female. Length 8 lines.—Head and thorax black, the vertex and disk of the thorax, scutellum and legs above, obscurely decorated with green pubescence (or scales), the face, vertex and cheeks densely covered with short white pubescence; the scape

of the antennæ black, the flagellum ferruginous beneath, fuscous above; the margin of the prothorax has a line of white pubescence, a similar one encircles the tubercles, another forms an epaulet over the tegulæ, a central one terminates on the disk and has an indistinct spot on each side of the same colour; on the scutellum are two raised conical tubercles; the wings dark fuscous, the nervures black; the legs have a black pubescence; the calcaria at the apex of the intermediate tibiæ have two large spines at their extremity, the anterior spine having three sharp denticulations within, the apex of the basal joint of the intermediate tarsi produced into an obtuse spine. Abdomen of a metallic green, covered above with minute scales; the extreme lateral margins of the segments covered with short white pubescence; the ventral plates have laterally on their posterior margins an angular patch of white, and the apical one an elevated longitudinal carina.

The male closely resembles the female, the antennæ are of the same length, the spur on the intermediate tibiæ is similar, but the abdomen is shorter, being incurved, the apical segment being subacute and notched in the middle. The posterior legs are more elongate than in the female, the femora and tibiæ beneath being naked, polished and concave; the tibiæ at their apex beneath have a brush of short stiff hairs, and the basal joint of the tarsi within has a clothing of the same.

Hab. Brazil (Santarem). (H. W. Bates.)

4. Melissa ornata.

Mesocheira ornata, *Spin. Ann. Soc. Ent. Fr.* x. 145. 96 (1841).

Hab. Cayenne.

Genus 35. MESOCHEIRA.

Maxillary palpi obsolete, or rudimentary, consisting of a small tubercle; the labial palpi four-jointed, the mentum short, broadest at the base; the first joint of the labial palpi longer than the mentum, the second of about one-third the length of the first, the two apical joints minute, placed on the side near the apex of the second joint. The superior wings having one marginal and three submarginal cells; the former not quite the length of the three latter, rounded at its apex; the second cell subquadrate, slightly constricted, and the third considerably so, towards the marginal. The intermediate tibiæ furnished with a single spine, its apex bifid, the anterior tooth bidentate within; the spines at the apex of the posterior tibiæ serrated within.

Note.—The generic characters are given at length in conse-

quence of the errors discovered in those of St. Fargeau in the 'Histoire naturelle des Insectes'; after a careful microscopic examination of several individuals of this genus, only rudimentary palpi or a small tubercle has been found in the maxillæ; St. Fargeau gives six joints in his characters. The genera *Mesoplia*, *Hopliphora* and *Mesonychium* of St. Fargeau are stated by that author to agree with the genus *Mesocheira* in the character of the oral organs; on a careful examination of those parts they are found to differ very widely, and the difference in the number of spines which arm the large calcaria of the intermediate tibiæ cannot be considered as affording anything beyond specific distinctions.

1. Mesocheira bicolor. B.M.

Melecta bicolor, *Fabr. Syst. Piez.* p. 386. 3.
Mesocheira bicolor, *St. Farg. & Serv. Ency. Méth.* x. 106.
Crocisa bicolor, *Jurine, Hym.* p. 241.

In this species the scutellum is produced over the base of the abdomen and deeply notched.

Hab. Brazil; Cayenne.

2. Mesocheira sericeus.

Mesocheira sericeus, *Guér. Icon. Règ. Anim.* p. 456.

Hab. Rio Janeiro.

3. Mesocheira asteria.

Female. Length 5 lines.—Head and thorax black, the face covered with silvery-white pubescence, a line of similar pubescence passes along the margin of the vertex and down the outer margin of the eyes; the flagellum rufo-piceous beneath; the base of the scape ferruginous in front. Thorax, the tubercles and tegulæ in front rufo-piceous; the scutellum bituberculate; a line on the collar continued round the tubercles, and the margins of the scutellum bordered with white pubescence; at the sides of the metathorax a tuft of white pubescence; the wings hyaline at their base, and having a fuscous cloud at their apical margins, the nervures black; the spurs at the apex of the intermediate tibiæ elongate, filiform, slightly bent, and notched at the apex, one side of the notch produced into a sharp spine, the other side bidenticulate; the spines on the posterior tibiæ finely serrated within. Abdomen conical, of a beautiful bright green, having a silken texture; the sides adorned with silvery-white markings; beneath testaceous, having spots of purple colouring, the sides of

the third and fourth segments having patches of silvery pubescence.

Hab. Brazil. (Coll. F. Smith.)

Genus 36. THALESTRIA, n. g.

(*F. Smith's MSS.*)

The ocelli placed in a triangle on the vertex; the labial palpi four-jointed, the basal joint about two-thirds of the length of the mentum, the second joint half the length of the basal, both covered with scattered pubescence. The maxillary palpi have one joint, and a small tubercle at its base. The labrum transverse, rounded at its angles, and tuberculate on each side at its base. The superior wings having one marginal and three submarginal cells; the former about the length of the three latter united, rounded at its apex; the second and third submarginal cells narrowed towards the marginal, the second receiving the first recurrent nervure a little beyond the middle; the second recurrent nervure received by the third submarginal cell about one-third from its apex. The calcaria simple.

1. Thalestria smaragdina.

Female. Length 8 lines.—Black, the face and cheeks have a dense short pale ochraceous pubescence, the clypeus more or less naked, truncate anteriorly and finely punctured, the pubescence (or scales) which decorate the thorax, brilliant green; anteriorly and down the centre intermixed with black; the collar on each side, a ring surrounding the tubercles, a spot beneath the wings, an epaulet over the tegulæ, and the metathorax on each side having a tuft of pale yellowish-white pubescence; the scutellum furnished behind with two pointed tubercles, and on each side with an acute incurved spine; the legs have a green iridescence, the apex of the femora and tibiæ having tufts of white pubescence; the wings hyaline, clouded at their apical margins. Abdomen, conical and covered with a brilliant green effulgence above, changing in certain lights to black or deep green; the extreme lateral margins of the three apical segments have a narrow stripe of white pubescence; beneath, the abdomen is naked and of a changeable blue-black colour.

Male.—Rather smaller than the female, and similar in colour, the thorax having a black pubescence, intermingled with obscure green on the disk, the scutellum similarly adorned; the abdomen is brilliant as in the other sex, the second and three following

segments having a round spot of white pubescence at their extreme lateral margins.

Hab. Para. (F. Smith's Coll.)

Genus 37. CTENIOSCHELUS.

Melissoda, *St. Farg. Hym.* ii. 508 (not of *Latr.* 1841).
Ischnocera, *Shuck. Hist. Ins. Lardner Ency.* (1840).
Ctenioschelus, *Romand, Mag. Zool.* (1841).

Antennæ of the females filiform, the apical joint compressed, rounded at the apex. The maxillary palpi composed of a single joint; the labial palpi four-jointed, the basal joint elongate, the second scarcely one-third the length of the first; the two apical joints minute, placed at the side of the second at its apex; the tongue elongate, twice the length of the labial palpi. The superior wings having one marginal and three submarginal cells; the former about the length of the three latter, rounded at its apex; the first recurrent nervure uniting with the second transverse cubital nervure; the second recurrent nervure received near the apex of the third submarginal cell. The intermediate tibiæ armed at their apex with a single spur, which is furcate at the apex; the anterior spine of the furcation having three acute teeth or spines on its posterior margin; the spines at the apex of the posterior tibiæ simple. In the males, the antennæ are longer than the body, the four apical joints being clavate, and the apex of the abdomen spinose.

1. Ctenioschelus Latreillii. B.M.

Melissoda Latreillii, *St. Farg. Hym.* ii. 508. pl. 16. f. 3 ♂.
Ctenioschelus Goryi, *Romand, Mag. Zool.* 1841, p. 4. pl. 69. f. 1 ♂.

Female.—This sex is rather larger than the male, but similar in colour, and having a similar calcar on the intermediate tibiæ; the abdomen is acute at the apex, and without spines; the third, fourth and fifth ventral segments of the abdomen have laterally on their posterior margins a patch of silvery-white pubescence.

Hab. Monte-Video; Paraguay; Brazil.

Genus 38. ACANTHOPUS.

Apis, pt., *Fabr. Ent. Syst.* ii. 316 (1793).
Xylocopa, pt., *Fabr. Syst. Piez.* p. 339 (1804).
Acanthopus, *Klug, Illig. Mag.* vi. (1809).

The labial palpi four-jointed, the two apical joints minute;

the maxillary palpi obsolete, or reduced to a minute tubercle; the superior wings having one marginal and three submarginal cells, the former longer than the three latter united, rounded at its apex; the first and second submarginal cells subquadrate, oblique; the third submarginal much narrowed towards the marginal, receiving the second recurrent nervure in the middle, the first recurrent nervure uniting with the second transverse cubital nervure; posterior legs elongate and densely pubescent in both sexes. In some instances the first recurrent nervure is received a little within the third submarginal cell, but the typical form appears to unite it to the transverse nervure.

1. ACANTHOPUS SPLENDIDUS. B.M.

Apis splendida, *Fabr. Ent. Syst.* ii. 316. 4.
Coqueb. Illustr. Icon. Ins. i. t. 6. f. 6.
Apis palmata, *Ency. Méth.* iv. 68. 41.
Xylocopa splendida, *Fabr. Syst. Piez.* p. 339. 5.
Acanthopus splendidus, *Klug, Illig. Mag.* vi.
St. Farg. Hym. ii. 509. 1.
Romand, Mag. Zool. 1841, tab. 68 ♂ ♀.
Epicharis splendida, *Latr. Gen. Crust. et Ins.* iv. 178.

Hab. Cayenne; Brazil.

Genus 39. AGLAE.

Aglae, *St. Farg. Ency. Méth.* x. 105; *Hym.* ii. 438.

The labial palpi composed of two joints, the basal joint half as long again as the mentum, the second joint twice its length, its apex terminating in a sharp spine or point; the maxillary palpi composed of one joint situated on a tubercle at the side of the maxillæ. The superior wings having one marginal and three submarginal cells, the former being longer than the three latter united.

St. Fargeau gives four joints to the labial palpi, which after an examination of several specimens cannot be detected.

1. AGLAE CÆRULEA. B.M.

Aglae cærulea, *St. Farg. Hym.* ii. 439. 1; *Ency. Méth.* x. 105. 1.

Hab. Brazil (Para); Venezuela; Cayenne.

Genus 40. MELECTA.

Apis, pt., *Fabr. Syst. Ent.* p. 378 (1775).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).

Melecta, *Latr. Hist. Nat.* xiv. 48 (1805).
Crocisa, pt., *Jurine, Hym.* p. 239 (1807).
Symmorpha, *Klug, Illig. Mag.* vi. 227 (1807).

1. Melecta luctuosa. B.M.

Apis luctuosa, *Scop. Ann. Hist. Nat.* iv. 9.
Schrank, Ins. Aust. p. 404. 816.
Rossi, Faun. Etrus. ii. 105. 918.
Gmel. Syst. Nat. v. 2785. 127.
Apis punctata, *Fabr. Syst. Ent.* p. 385. 43; *Spec. Ins.* i. 484. 60; *Mant. Ins.* i. 304. 71; *Ent. Syst.* ii. 337. 99.
Melecta punctata, *Latr. Hist. Nat. Ins.* xiv. 48.
Fabr. Syst. Piez. p. 387. 7.
Spin. Ins. Lig. fasc. 1. 153. 3.
Brullé, Expéd. Sc. Morée, p. 342. 757.
Blanch. Hist. Nat. Ins. iii. 411. t. 6. f. 8.
Eversm. Bull. Mosc. xxv. 103. 1.
St. Farg. Hym. ii. 441. 1.
Lucas, Explo. Sc. Algér. iii. 211. 145.
Symmorpha punctata, *Klug, Illig. Mag.* vi. 227.
Melecta notata, *Illig. Mag.* viii. 99. 2.
Melecta atropos, *Newm. Ent. Mag.* ii. 514. 6 ♂.
Smith, Zool. iii. 1149. 2 ♂ ♀.
Melecta Lachesis, *Newm. Ent. Mag.* ii. 514. 5 ♀.

Hab. Britain; France; Italy; Germany; Spain; Denmark; Sweden; Russia.

2. Melecta armata. B.M.

Apis punctata, *Kirby, Mon. Ap. Angl.* ii. 219. 35.
Don. Brit. Ins. xii. 47. 376.
Andrena armata, *Panz. Faun. Germ.* 70. 22.
Centris punctata, *Fabr. Syst. Piez.* p. 360. 30?
Melecta punctata, *Illig. Mag.* v. 98. 1.
Smith, Zool. iii. 1148.
Melecta Clotho, *Newm. Ent. Mag.* ii. 513. 4 ♀.
Melecta Megæra, *Newm. Ent. Mag.* ii. 513. 2 (var. ♀).
Melecta Tisiphone, *Newm. Ent. Mag.* ii. 513. 1 (var. ♀).
Melecta Alecto, *Newm. Ent. Mag.* ii. 513. 3 ♂.

Hab. Britain; France; Germany.

3. Melecta diacantha.

Melecta diacantha, *Eversm. Bull. Mosc.* xxv. 103. 2.

Hab. Russia.

4. Melecta aterrima.

Melecta aterrima, *St. Farg. Hym.* ii. 447. 9.

Hab. France (Island of Noirmoutier). (Coll. F. Smith.)

5. Melecta nigra.

Melecta nigra, *St. Farg. Hym.* ii. 446. 6.
Brullé, Hist. Nat. Isl. Canar. 89. 39.

Hab. Italy; Canary Islands; Sicily. (Coll. F. Smith.)

This species might possibly be considered an extreme variety of *punctata*, but the antennæ are longer than in that species; the specimen examined is from Sicily.

6. Melecta bipunctata.

Melecta bipunctata, *St. Farg. Hym.* ii. 446. 7.

Hab. Italy; Tuscany.

7. Melecta fasciculata.

Melecta fasciculata, *Spin. Ins. Lig.* fasc. 1. p. 45. 17. t. 1. f. 15.
Brullé, Expéd. Sc. Morée, iii. 342. 759. t. 48. f. 11.

Hab. Italy; The Morea.

8. Melecta plurinotata. B.M.

Melecta plurinotata, *Brullé, Expéd. Sc. Morée, Zool.* p. 343. 760.
St. Farg. Hym. ii. 442. 2.
Lucas, Explo. Sc. Algér. iii. 211. 146.

Hab. The Morea; Bagdad; Sicily; Spain; Algeria.

9. Melecta funeraria.

Female. Length 6 lines.—Intensely black; the face, a broad band on the collar, a tuft behind the wings, a large rounded patch on the sides of the basal segment of the abdomen, a large subquadrate one on the second, and a quadrate one on the third and fourth segments on each side, snow-white; the legs entirely black, the wings fusco-hyaline.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

10. Melecta grandis. B.M.

Melecta grandis, *St. Farg. Hym.* ii. 443. 3.
Lucas, Explo. Sc. Algér. iii. 211. 147. t. 9. f. 11.

Hab. Algeria (Oran).

11. Melecta Chiliensis.

Female. Length 7 lines.—Black, a tuft on the face, the thorax above and the two basal segments of the abdomen, clothed with white pubescence, that on the apical segments dark green.

Hab. Chili. (Coll. F. Smith.)

12. Melecta nigripennis.

Melecta nigripennis, *St. Farg. Hym.* ii. 445. 5.

Hab. ——?

13. Melecta testaceipes.

Melecta testaceipes, *St. Farg. Hym.* ii. 447. 8.

Hab. ——?

14. Melecta septemnotata.

Melecta septemnotata, *Spin. Faun. Chili.* vi. 186. 1.

Male. Length 3 lines.—The antennæ, body and legs black; the pubescence long and white on the head and thorax above; the wings hyaline, the nervures black.

Hab. Chili.

Genus 41. OSIRIS, n. g.

(*F. Smith's MSS.*)

Body elongate, naked, destitute of pollinigerous organs; maxillary palpi five-jointed, slender, the joints of about equal length, the maxillæ very long and slender, tapering to a point; mentum less than half the length of the labium, which is about half the length of the body; the labial palpi four-jointed, the basal joint very long, the second about twice the length of the two apical joints; labrum transverse, slightly emarginate anteriorly, the mandibles bidentate. The superior wings having one marginal and three submarginal cells, the first as long as the three latter, the second submarginal cell nearly quadrate, the third a little wider and narrowed towards the marginal; the basal joint of the posterior tarsi as long as the tibiæ, the following joints short, their united length less than that of the basal joint. Abdomen, the sixth segment concealed, the ventral portion of the apical segment produced, forming an elongate concave receptacle for the basal portion of the sting; the sting apparently always exserted, as long as the abdomen; the male having apparently only six segments in the abdomen, the seventh concealed.

1. Osiris pallidus.

Male. Length 5 lines.—Pale testaceous, apex of the mandibles, eyes and flagellum fusco-ferruginous, the apical joint of the latter and towards its base beneath, ferruginous. The collar bilobate, the disk of the thorax fuscous, and having a central oblong-ovate pale testaceous macula; down the middle of the disk a slightly elevated carina, the scutellum transverse, somewhat rounded and elevated; the metathorax and femora within are pale yellow-testaceous; wings flavo-hyaline, the costal nervure fuscous, the stigma and the nervures towards the apex of the wing pale ferruginous, towards the base of the wing the nervures are darker. Abdomen elongate, pale rufo-testaceous, the apical margins of the segments slightly fuscous in the middle.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

2. Osiris variegatus.

Male. Length 5 lines.—Head and thorax yellow-testaceous varied with fuscous; the antennæ, face, leaving the orbits of the eyes yellow, and the base of the clypeus fusco-testaceous; an elevation between the antennæ yellow; the margin of the vertex fuscous, as well as the space behind the ocelli; between the ocelli and the eyes the vertex is yellow. The disk of the thorax, the posterior margin of the scutellum and the metathorax on each side, the trochanters and femora beneath, as well as an oblique line beneath the wings, fusco-testaceous; wings yellowish hyaline, stigma and nervures towards the apex testaceous, those towards the base of the wings darker. Abdomen elongate, fuscous, the basal margins of all the segments above and beneath yellow-testaceous.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

Genus 42. CHRYSANTHEDA.

Apis, pt., *Linn. Syst. Nat.* i. 953.
Chrysantheda, *Perty, Del. An. Art.* p. 148.
Euglossa, pt., *Guér. Icon. Règ. Anim. Ins.* p. 457.

1. Chrysantheda dentata. B.M.

Apis dentata, *Linn. Syst. Nat.* i. 954. 14.
Fabr. Ent. Syst. ii. 339. 108.
Euglossa dentata, *Fabr. Syst. Piez.* p. 363. 2.
Latr. Gen. Cr. Ins. iv. 180.
Guér. Icon. Règ. Anim. Ins. p. 457. t. 75. f. 2.
Sulz. Gesch. Ins. t. 27. f. 16.

Hab. Brazil; Columbia; Demerara.

2. Chrysantheda nitida. B.M.

Chrysantheda nitida, *Perty, Del. An. Art.* p. 148. t. 28. f. 8.

Hab. Brazil; Columbia; Demerara; Venezuela.

3. Chrysantheda frontalis. B.M.

Euglossa frontalis, *Guér. Icon. Règ. Anim. Ins.* p. 458. 3.

Hab. Brazil (Para).

4. Chrysantheda smaragdina. B.M.

Euglossa smaragdina, *Guér. Icon. Règ. Anim. Ins.* p. 458. 2.

Hab. Brazil.

5. Chrysantheda appendiculata.

Chrysantheda appendiculata, *Romand, Ann. Soc. Ent. Fr.* 2me sér. vii. *Bull.* p. xxxvi. t. 7. f. 1 ♂.

Hab. Caraccas.

Subfam. 4. SCOPULIPEDES.

Genus 43. EUCERA.

Apis, pt., *Linn. Syst. Nat.* i. (1785).
Eucera, *Scop. Ann. Hist. Nat.* iv. (1769).
Andrena, pt., *Panz. Faun. Germ.* fasc. 78 (1804).

The maxillary palpi 4-jointed; the labial palpi 4-jointed; the superior wings having one marginal and two submarginal cells. The antennæ of the males elongate.

1. Eucera longicornis. B.M.

Apis longicornis, *Linn. Faun. Suec.* 1684; *Syst. Nat.* i. 953. 1 ♂.
Scop. Ent. Carn. p. 794. f. 794.
Fabr. Syst. Ent. p. 388. 58.
Schäff. Icon. Ins. t. 44. f. 3.
Fourc. Ent. Par. ii. 445. 10.
Rossi, Faun. Etrus. ii. 922.
Christ. Hym. p. 142. t. 11. f. 9.
Kirby, Mon. Ap. Angl. ii. 278. 59 ♂ ♀.
Eucera longicornis, *Scop. Ann. Hist. Nat.* iv. 8. 1 ♂.
Fabr. Ent. Syst. ii. 343. 1 ♂.
Latr. Hist. Nat. xiv. 43. 1.
Brullé, Expéd. Sc. Morée, p. 334. 742.
Zett. Ins. Lapp. p. 469. 1.
Blanch. Hist. Nat. Ins. iii. 407.

Eucera longicornis, *St. Farg. Hym.* ii. 118. 3.
Smith, Zool. iv. 1449. 1.
Nyland. Ap. Boreal. p. 249. 1.
Bär, Bull. Mosc. xxiii. 530. t. 13. f. 1.
Eversm. Bull. Mosc. xxv. 119. 2.
Apis tumulorum, *Sulz. Hym.* p. 198. t. 27. f. 14 ♂.
Christ. Hym. p. 198. t. 17. f. 9.
Fabr. Ent. Syst. ii. 344. 3.
Don. Brit. Ins. v. 19. t. 151. 2.
Apis tuberculata, *Fabr. Ent. Syst.* ii. 334. 84 ♀.
Panz. Faun. Germ. 78. 19.
Apis linguaria, *Kirby, Mon. Ap. Angl.* ii. 282 ♂. 60, and *Cab. Mus. Ent. Soc.*
Eucera linguaria, *Panz. Faun. Germ.* 64. 22 ♂?
St. Farg. Hym. ii. 122. 6.
Bär, Bull. Mosc. xxiii. 534. 11. t. 13. f. 11.
Andrena strigosa, *Panz. Faun. Germ.* 64. 16 ♀.
Eucera similis, *St. Farg. Hym.* ii. 121. 4?

Hab. Europe; Algeria.

2. Eucera distincta.

Eucera distincta, *St. Farg. Hym.* ii. 139. 31 ♂.

Hab. France.

3. Eucera fasciatella.

Eucera fasciatella, *St. Farg. Hym.* ii. 130. 19 ♂.

Hab. France (Paris, Forest of Bondy).

4. Eucera nigrilabris. B.M.

Eucera nigrilabris, *St. Farg. Hym.* ii. 116. 1.
Lucas, Explo. Sc. Algér. iii. t. 3. f. 4 ♀.
Eucera numida, *St. Farg. Hym.* ii. 117. 2, var.
Bär, Bull. Mosc. xxiii. pt. 1. p. 532. 6. t. 13. f. 6 ♂?

Hab. South of France; Algeria (Oran).

5. Eucera nigrifacies.

Eucera nigrifacies, *St. Farg. Hym.* ii. 132. 20 ♂.

Hab. Bordeaux.

6. Eucera punctilabris.

Eucera punctilabris, *St. Farg. Hym.* ii. 132. 21 ♂.

Hab. Bordeaux.

7. Eucera subfasciata.

Eucera subfasciata, *St. Farg. Hym.* ii. 136. 27 ♂.

Hab. France.

8. Eucera subrufa.

Eucera subrufa, *St. Farg. Hym.* ii. 129. 17 ♂.

Hab. Lyons.

9. Eucera brevicornis.

Eucera brevicornis, *Fabr. Ent. Syst. Supp.* p. 278. 8.

Hab. Italy.

10. Eucera analis.

Eucera analis, *Bär, Bull. Mosc.* xxiii. 532. 4. t. 13. f. 4 ♂.

Hab. Russia.

11. Eucera albicans.

Eucera albicans, *Bär, Bull. Mosc.* xxiii. 532. 5. t. 13. f. 5 ♂.

Hab. Russia.

12. Eucera binominata.

Eucera dimidiata, *Bär, Bull. Mosc.* xxiii. 531. 2. t. 13. f. 2 ♂ (not of *Brullé*).

Hab. Russia.

13. Eucera cantatrix.

Eucera cantatrix, *Bär, Bull. Mosc.* xxiii. 536. 16. t. 13. f. 16 ♀.

Hab. Russia.

14. Eucera crinita.

Eucera crinita, *Bär, Bull. Mosc.* xxiii. 536. 14. t. 13. f. 14.

Hab. Russia.

15. Eucera cingulata.

Eucera cingulata, *Bär, Bull. Mosc.* xxiii. 534. 10. t. 13. f. 10.

Hab. Russia.

16. Eucera continua.

Eucera continua, *Bär, Bull. Mosc.* xxiii. 535. 12. t. 13. f. 12 ♀.

Hab. Russia.

17. Eucera cana.

Eucera cana, *Bär, Bull. Mosc.* xxiii. 535. 13. t. 13. f. 13.
Hab. Russia.

18. Eucera Dasypoda.

Eucera Dasypoda, *Bär, Bull. Mosc.* xxiii. 533. 8. t. 13. f. 8 ♀.
Hab. Russia.

19. Eucera Fischeri.

Eucera Fischeri, *Bär, Bull. Mosc.* xxiii. 531. 3. t. 13. f. 3 ♂.
Hab. Russia.

20. Eucera interrupta.

Eucera interrupta, *Bär, Bull. Mosc.* xxiii. 533. 7. t. 13. f. 7 ♀.
Hab. Russia.

21. Eucera robusta.

Eucera robusta, *Bär, Bull. Mosc.* xxiii. 534. 9. t. 13. f. 9 ♂.
Hab. Russia.

22. Eucera vittigera.

Eucera vittigera, *Bär, Bull. Mosc.* xxiii. 536. 15. t. 13. f. 15 ♀.
Hab. Russia.

23. Eucera coarctata.

Eucera coarctata, *Eversm. Bull. Mosc.* xxv. 119. 3.
Hab. Russia.

24. Eucera cineraria.

Eucera cineraria, *Eversm. Bull. Mosc.* xxv. 120. 4.
Hab. Russia.

25. Eucera Dalmatica. B.M.

Eucera Dalmatica, *St. Farg. Hym.* ii. 133. 22 ♂.
Hab. Dalmatia.

26. Eucera glauca.

Eucera glauca, *Fabr. Ent. Syst.* ii. 344. 4 ♂.
Hab. Bagdad.

27. Eucera grisea. B.M.

Eucera grisea, *Fabr. Ent. Syst.* ii. 345. 6; *Syst. Piez.* p. 383. 7.
Spin. Ins. Lig. fasc. 1. 150. 3.
Eucera bicolor, *St. Farg. Hym.* ii. 127. 14.
Macrocera grisea, *Eversm. Bull. Mosc.* xxv. 123. 4?

Hab. Barbary; Algeria (Oran).

28. Eucera atricornis.

Eucera atricornis, *Fabr. Ent. Syst.* ii. 344. 2; *Syst. Piez.* 382. 2.
Coqueb. Illus. Ins. dec. 2. p. 64. t. 15. f. 11.
Spin. Ins. Lig. fasc. 1. 150. 3.
St. Farg. Hym. ii. 128. 15.
Lucas, Explo. Sc. Algér. iii. 162. 43.

Hab. Barbary; Algeria (Oran).

29. Eucera dimidiata.

Eucera dimidiata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 334. 741 ♂.

Hab. The Morea.

30. Eucera seminuda.

Eucera seminuda, *Brullé, Expéd. Sc. Morée, Zool.* iii. 335. 745. t. 48. f. 6.

Hab. The Morea.

31. Eucera trivittata.

Eucera trivittata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 335. 746 ♀.

Hab. The Morea.

32. Eucera vulpes.

Eucera vulpes, *Brullé, Expéd. Sc. Morée, Zool.* iii. 336. 747 ♂.

Hab. The Morea.

33. Eucera pollinosa. B.M.

Female. Length 6½ lines.—Black, the face has a pale fulvous pubescence, that on the labrum is of the same colour, the mandibles ferruginous towards the apex, the tips black; the thorax above clothed with fulvous pubescence; the legs rufo-piceous, their pubescence fulvous, that on the tarsi beneath ferruginous, the apical joints of the tarsi ferruginous; the tegulæ pale testaceous, the wings fulvo-hyaline, the nervures ferruginous, slightly clouded at their apical margins. The base of the abdomen has

a long pale fulvous pubescence, the five apical segments, except the middle of the first, entirely covered with a very short fulvous pubescence, resembling the pollen of flowers; the basal segment has also a little at its lateral angles, this pubescence becomes gradually brighter towards the apex; the apical segments beneath have a long fulvous fringe.

Hab. Albania.

34. Eucera Hispana.

Eucera Hispana, *St. Farg. Hym.* ii. 135. 25 ♀.

Hab. Spain.

35. Eucera nigripes.

Eucera nigripes, *Klug, Symb. Phys.* dec. v. t. 50. f. 8.

Hab. Syria.

36. Eucera helvola.

Eucera helvola, *Klug, Symb. Phys.* dec. v. t. 50. f. 7.

Hab. Syria.

37. Eucera thoracica.

Eucera thoracica, *Spin. Ann. Soc. Ent. Fr.* vii. 537. 77 ♂ (1838).

Hab. Egypt.

38. Eucera affinis.

Eucera affinis, *Spin. Ann. Soc. Ent. Fr.* vii. 538. 78 ♀.

Hab. Egypt.

39. Eucera unicincta.

Eucera unicincta, *St. Farg. Hym.* ii. 138. 29 ♂.
Lucas, Explo. Sc. Algér. iii. 163. 46. t. 4. f. 4.

Hab. Algeria (Oran).

40. Eucera vidua.

Eucera vidua, *St. Farg. Hym.* ii. 121. 5.
Lucas, Explo. Sc. Algér. iii. 159.

Hab. Algeria (Oran).

41. Eucera subvillosa.

Eucera subvillosa, *St. Farg. Hym.* ii. 125. 9 ♂.
Lucas, Explo. Sc. Algér. iii. 169. 39. t. 3. f. 7.

Hab. Algeria (Oran).

42. Eucera pyrrhula.

Eucera pyrrhula, *Erich. in Wagner, Reis. in der Regents Algier.* iii. 195. 55. t. 9.
Lucas, Explo. Sc. Algér. iii. 159.

Hab. Algeria.

43. Eucera Oraniensis.

Eucera Oraniensis, *St. Farg. Hym.* ii. 128. 7 ♂.
Lucas, Explo. Sc. Algér. iii. 159. t. 3. f. 2 ♀. 2 *b*.
Eucera grisea, *Fabr. Ent. Syst.* ii. 345. 6?

Hab. Algeria (Oran).

44. Eucera notata.

Eucera notata, *St. Farg. Hym.* ii. 126. 11 ♂.
Lucas, Explo. Sc. Algér. iii. 161. 40. t. 3. f. 6.

Hab. Algeria (Oran).

45. Eucera nigra.

Eucera nigra, *St. Farg. Hym.* ii. 126. 12 ♀.
Lucas, Explo. Sc. Algér. iii. 126. 41. t. 4. f. 1.

Hab. Algeria (Oran).

46. Eucera ferruginea.

Eucera ferruginea, *St. Farg. Hym.* ii. 140. 33 ♀.
Lucas, Explo. Sc. Algér. iii. 164. 47. t. 4. f. 5.

Hab. Algeria (Oran).

47. Eucera bicincta.

Eucera bicincta, *St. Farg. Hym.* ii. 137. 28 ♂.
Lucas, Explo. Sc. Alger. iii. 163. 45. t. 4. f. 3.

Hab. Algeria (Oran).

48. Eucera Africana.

Eucera Africana, *St. Farg. Hym.* ii. 124. 8 ♂.
Lucas, Explo. Sc. Algér. iii. 160. t. 3. f. 3.

Hab. Algeria (Oran).

49. Eucera Algira.

Eucera Algira, *St. Farg. Hym.* ii. 134. 23 ♀.
Brullé, Hist. Nat. Il. Canar. ii. 85. 12.
Lucas, Explo. Sc. Algér. iii. 162. 44. t. 4. f. 2.

Hab. Algeria (Oran).

50. Eucera rufescens.

Eucera rufescens, *St. Farg. Hym.* ii. 130. 18 ♂.

Hab. Cayenne.

51. Eucera alternans.

Eucera alternans, *St. Farg. Hym.* ii. 138. 30 ♂.

Hab. —— ?

52. Eucera cinerea.

Eucera cinerea, *St. Farg. Hym.* ii. 125. 11 ♂.

Hab. —— ?

53. Eucera marginata.

Eucera marginata, *St. Farg. Hym.* ii. 135. 26 ♂.

Hab. —— ?

54. Eucera pulvinata.

Eucera pulvinata, *St. Farg. Hym.* ii. 140. 32 ♀.

Hab. —— ?

55. Eucera squamosa.

Eucera squamosa, *St. Farg. Hym.* ii. 134. 24 ♀.

Hab. —— ?

56. Eucera vetula.

Eucera vetula, *St. Farg. Hym.* ii. 127. 13 ♂.

Hab. —— ?

Genus 44. TETRALONIA.

Apis, pt., *Rossi, Faun. Etrus.* 923 (1790).
Eucera, pt., *Fabr. Ent. Syst.* ii. 343 (1793).
Macrocera, *Latr. Fam. Nat.* (nec *Meig. Illig. Mag.* 1803, *Dipt.*) (1825).
Tetralonia, *Spin. Ann. Soc. Ent. Fr.* vii. (1838).

The maxillary palpi 6-jointed, the labial palpi 4-jointed; the superior wings having one marginal, and three complete submarginal cells; the first recurrent nervure received at or very near the apex of the second submarginal cell, occasionally uniting with the second transverse cubital nervure, the second recurrent nervure received at the apex of the third submarginal cell. The antennæ of the males elongate.

1. Tetralonia atricornis.

Eucera atricornis, *Panz. Faun. Germ.* 106. 20 ♂.
Tetralonia atricornis, *Spin. Ann. Soc. Ent. Fr.* vii. (1838), 539. 80.
Macrocera atricornis, *Eversm. Bull. Mosc.* xxv. 122. 1.

Hab. Europe; Egypt.

2. Tetralonia alticincta. B.M.

Macrocera alticincta, *St. Farg. Hym.* ii. 101. 14.

Hab. France (Paris).

3. Tetralonia antennata.

Eucera antennata, *Fabr. Ent. Syst.* ii. 345. 7; *Syst. Piez.* 384. 8 ♂.
Spin. Ins. Lig. fasc. 1. 149. 2.
Panz. Faun. Germ. 99. 18.
Macrocera antennata, *Eversm. Bull. Mosc.* xxv. 123. 6.

Hab. Europe.

4. Tetralonia grandis.

Macrocera grandis, *Fons. Ann. Soc. Ent. Fr.* iv. n.ser. (1846), 46. 6 (var. ruficollis, *St. Farg.*?).

Hab. France (Aix).

5. Tetralonia longicornis. B.M.

Eucera longicornis, *Panz. Faun. Germ.* 64. 21?
Macrocera longicornis, *St. Farg. Hym.* ii. 90. 2.
Lucas, Explo. Sc. Algér. iii. 156. 29. t. 3. f. 1.

Hab. Dalmatia; Montpellier; Algeria.

6. Tetralonia Malvæ.

Apis Malvæ, *Rossi, Faun. Etrus.* ii. 923.
Eucera antennata, *Fabr. Ent. Syst.* ii. 345. 7 ♂.
Latr. Hist. Nat. Crust. Ins. xiv. 44.
Panz. Faun. Germ. 99. 18.
Eucera Malvæ, *Latr. Gen. Crust. Ins.* iv. 274.

Hab. France; Italy; Germany.

7. Tetralonia pollinosa.

Macrocera pollinosa, *St. Farg. Hym.* ii. 92. 4.

Hab. France (St. Sever).

8. Tetralonia Salicariæ.

Macrocera Salicariæ, *St. Farg. Hym.* ii. 102. 15.

Hab. France (Paris).

9. Tetralonia dentata.

Macrocera dentata, *Klug, Germ. Faun. Europ.* 21. 25.
Eversm. Bull. Mosc. xxv. 122. 3.

Hab. Russia.

10. Tetralonia nasalis.

Macrocera nasalis, *Eversm. Bull. Mosc.* xxv. 123. 5 ♂.

Hab. Russia.

11. Tetralonia mediocris.

Macrocera mediocris, *Eversm. Bull. Mosc.* xxv. 122. 2 ♂.

Hab. Russia.

12. Tetralonia graja.

Macrocera graja, *H. Schäff. Nomen. Entom.* p. 165.
Eversm. Bull. Mosc. xxv. 124. 7.

Hab. Russia.

13. Tetralonia albida.

Macrocera albida, *St. Farg. Hym.* ii. 98. 10 ♂.

Hab. Spain.

14. Tetralonia ruficornis. B.M.

Macrocera ruficornis, *St. Farg. Hym.* ii. 107. 20 ♂.
Eucera ruficornis, *Fabr. Syst. Piez.* 383. 5.
Lucas, Explo. Sc. Algér. iii. 165. 48. t. 4. f. 6.

Hab. Spain.

15. Tetralonia ruficollis. B.M.

Macrocera ruficollis, *Brullé, Expéd. Sc. Morée,* iii. 333. 740 ♂. t. 48. f. 5.
St. Farg. Hym. ii. 89. 1 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 156. 28. t. 2. f. 9.
Macrocera alternans, *Brullé, Expéd. Sc. Morée,* iii. 332. 739 ♀. t. 48. f. 4?
St. Farg. Hym. ii. 108. 22.
Lucas, Explo. Sc. Algér. iii. 157. 31.

Macrocera rufa, *St. Farg. Hym.* ii. 91. 3 ♂.
Lucas, Explo. Sc. Algér. 157. 30.
Tetralonia atricornis, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 539. 80.
Eucera ruficollis, *Klug, Symb. Phys.* dec. v. tab. 50. f. 9, 10.
Hab. Greece; Spain; Algeria (Oran).

16. TETRALONIA STRIGATA.
Macrocera strigata, *St. Farg. Hym.* ii. 104. 16 ♂.
Hab. Spain.

17. TETRALONIA SUBUNDULATA.
Macrocera subundulata, *St. Farg. Hym.* ii. 106. 19 ♀.
Hab. Spain.

18. TETRALONIA TARSATA.
Tetralonia tarsata, *Spin. Ann. Soc. Ent. Fr.* vii. 541 ♂.
Hab. Sicily.

19. TETRALONIA GROHMANNI.
Tetralonia Grohmanni, *Spin. Ann. Soc. Ent. Fr.* vii. 540 ♂.
Hab. Sicily.

20. TETRALONIA OLIVIERI.
Macrocera Olivieri, *St. Farg. Hym.* ii. 111. 25 ♂.
Hab. Bagdad.

21. TETRALONIA ATRATA.
Macrocera atrata, *Klug, Symb. Phys.* dec. v. t. 50. f. 13.
Hab. Egypt (Cairo).

22. TETRALONIA PUMILA.
Macrocera pumila, *Klug, Symb. Phys.* dec. v. t. 50. f. 15.
Hab. Egypt (Cairo).

23. TETRALONIA CAPENSIS.
Macrocera Capensis, *St. Farg. Hym.* ii. 95. 7 ♂.
Hab. Africa. (Coll. F. Smith.)

24. TETRALONIA BASIZONA.
Tetralonia basizona, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 538. 79.
Hab. Egypt.

25. Tetralonia cuniculina.

Macrocera cuniculina, *Klug, Symb. Phys.* dec. v. t. 50. f. 14.
Hab. Egypt (Cairo).

26. Tetralonia crinita.

Macrocera crinita, *Klug, Symb. Phys.* dec. v. t. 50. f. 12.
Hab. Egypt (Cairo). (Coll. W. W. Saunders, Esq.)

27. Tetralonia lanuginosa.

Macrocera lanuginosa, *Klug, Symb. Phys.* dec. v. t. 50. f. 11.
Hab. Egypt.

28. Tetralonia testacea. B.M.

Male. Length 4½ lines.—The face below the antennæ pale rufo-testaceous, the labrum, mandibles and inferior margin of the cheeks ferruginous, the antennæ ferruginous, fuscous above towards their apex, the vertex black; the thorax dark rufo-testaceous, on the disk are two obscure parallel longitudinal lines of a lighter colour, the disk has a thin short griseous pubescence; on the metathorax and beneath it is of the same colour, but longer; the tegulæ and legs pale rufo-testaceous; the wings fulvo-hyaline, the nervures ferruginous. Abdomen fusco-ferruginous, naked or merely having a few scattered griseous hairs, beneath brighter ferruginous.

Hab. Africa.

29. Tetralonia Chinensis. B.M.

Male. Length 5½ lines.—Black, the clypeus yellow, the labrum white, fringed with bright pale yellow hairs; the sides of the face below the antennæ covered with long griseous pubescence; on the vertex and disk of the thorax a clothing of pale fulvous pubescence, on the cheeks and thorax beneath it is white; the antennæ as long as the body, the joints subarcuate; the tegulæ pale testaceous, the wings subhyaline, the nervures pale ferruginous; the four apical joints of the tarsi pale ferruginous, the pubescence of the legs pale ochraceous. Abdomen nigro-æneous, the apical margins of the segments broadly rufo-testaceous; the basal segments have a thin pale fulvous pubescence, beyond which it is fuscous.

Hab. North China (Shanghai).

30. Tetralonia Duvaucelii.

Macrocera Duvaucelii, *St. Farg. Hym.* ii. 98. 11 ♂.

Hab. India (Bengal).

31. Tetralonia elegans.

Male. Length 5 lines.—Black, the clypeus, labrum and mandibles yellow, the latter ferruginous at their apex; the flagellum, tegulæ, nervures of the wings and the apical joints of the tarsi bright ferruginous; the face and legs have a silvery white pubescence; that on the disk of the thorax pale fulvous; the wings hyaline, very faintly clouded at their apical margins; the base of the abdomen has a little pale fulvous pubescence, the three following segments have on their basal margins a fascia of short white pubescence, the third fascia broad, nearly covering the segment, the fifth segment entirely covered; the apical segment covered on each side with fuscous pubescence; beneath, the margins of the segments rufo-testaceous and ciliated with white pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

32. Tetralonia Floralia.

Male. Length 5 lines.—Black, the face thinly covered with a long griseous pubescence, the labrum having a long beard of pale yellow hairs; the clypeus yellow, the antennæ longer than the body, the joints subarcuate. Thorax, the disk shining, strongly punctured, thinly clothed with pale yellow pubescence, the wings hyaline, the nervures and tegulæ rufo-testaceous; the legs have a dense pale glittering silvery pubescence, the apical joints of the tarsi bright ferruginous. Abdomen ovate, convex, the base coarsely punctured, the apical margins of segments testaceous and having a fringe of pale pubescence; the base having some long pale hairs, and the entire abdomen a short scale-like pubescence.

Hab. North China (Shanghai).

33. Tetralonia fasciata. B.M.

Male. Length 4½ lines.—Black, the clypeus, labrum and tips of the mandibles yellowish-white; the flagellum fulvous beneath; the pubescence on the face below the antennæ white; above, as well as on the disk of the thorax, it is pale fulvous, and on the cheeks and thorax beneath griseous; the wings fulvo-hyaline, the nervures ferruginous, the tegulæ testaceous; the apical joints of the tarsi ferruginous, the legs have a bright yellowish-white pu-

bescence, on the basal joint of the posterior tarsi within it is fulvous. Abdomen of a dark fuscous, the apical margins of the segments narrowly rufo-testaceous; the base has a little pale fulvous pubescence, the second and third segments have a fascia of white short scale-like pubescence, the first much attenuated in the middle, the other segments are entirely covered with a similar pubescence.

Hab. North China (Foo-cho-foo).

34. TETRALONIA TRICINCTA.

Macrocera tricincta, *St. Farg. Hym.* ii. 101. 14.

Hab. Algeria.

35. TETRALONIA SENEX.

Male. Length 4 lines.—Black, entirely covered with snow-white pubescence, the sixth and seventh segments of the abdomen black, beneath black; the legs black beneath, the posterior tarsi entirely so; the flagellum except the two apical joints nigro-piceous beneath; the clypeus and mandibles white, the apex of the latter ferruginous, the claws dark ferruginous: the wings hyaline, the nervures ferruginous, pale towards the base of the wings, the tegulæ pale rufo-testaceous.

Hab. Algeria? (Coll. J. S. Baly, Esq.)

36. TETRALONIA BREVICORNIS. B.M.

Male. Length 5½ lines.—Black, the pubescence on the head and thorax pale ochraceous, that on the cheeks, sides of the metathorax and on the thorax beneath griseous; the antennæ not longer than the head and thorax, submoniliform, fulvous beneath; the mandibles ferruginous, their tips black; the wings subhyaline, faintly clouded at their apical margins, the tegulæ ferruginous; the tibiæ and tarsi ferruginous. Abdomen fusco-testaceous, sometimes rufo-testaceous, the apical margins being pale; the whole abdomen has a thinly scattered griseous pubescence, that on the margins slightly fulvous; beneath, the margins of the segments are of a shining reddish yellow, having a transparent lustre.

Hab. Australia (Moreton Bay).

37. TETRALONIA TERMINATA.

Female. Length 5½ lines.—Black, the face clothed with cinereous pubescence, the cheeks densely covered with white pubescence, the mandibles yellow towards their apex, their tips

black, the flagellum fulvous beneath; the thorax covered anteriorly with sooty-black pubescence, posteriorly with fulvous, the fulvous pubescence forming an epaulet over the tegulæ; the wings fusco-hyaline; legs dark rufo-testaceous, their pubescence black. Abdomen ovate, shining, and having a little cinereous pubescence at the base, the apical margin of the third segment and the whole of the fourth and fifth segments covered with a silvery pubescence, sometimes it has a golden lustre, the apex fuscous and having on each side some long white hairs; the abdomen obscure rufo-testaceous beneath, the margins of the segments palest, the two apical ones fringed with pale pubescence.

Hab. South America. (Coll. F. Smith.)

38. Tetralonia bifasciata.

Female. Length 5¼ lines.—Black, the pubescence on the head, thorax and legs fuscous, on each side of the clypeus is a little that is short and white, on the cheeks it is also white; on the sides of the metathorax it is griseous; the scopa on the posterior tibiæ in certain lights has a fulvous tint; the flagellum fulvous beneath, the labrum, apex of the mandibles and apical joints of the tarsi ferruginous; the legs fusco-ferruginous; the wings fulvo-hyaline, the nervures ferruginous, their tegulæ rufo-testaceous. The abdomen has an æneous tinge, the margin of the basal segment being narrowly rufo-testaceous, the second and third segments have their margins broadly pale yellow-testaceous, the following segments faintly testaceous; the pale fasciæ have thin golden pubescence, the base of the abdomen has a little white pubescence; beneath, rufo-testaceous, the margins of the segments having a thin fringe of curled white pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

39. Tetralonia analis. B.M.

Macrocera analis, *St. Farg. Hym.* ii. 104. 16 ♂.

Hab. Brazil.

40. Tetralonia festiva.

Female. Length 5 lines.—Black, the pubescence on the sides of the face and labrum short, dense, and of a yellowish-white, it is of the same hue but thinner on the clypeus, which is coarsely punctured, apex of the mandibles yellow; the flagellum, except the three basal joints, fulvous beneath. Thorax, the disk has an æneous tinge, the sides densely clothed with a short pale fulvous pubescence, on each side in front of the tegulæ is a tuft of black pubescence, the scutellum is clothed with pubescence of the same

colour, and surrounded with a thick fringe of pale fulvous; the tegulæ pale fulvo-testaceous, the wings fulvo-hyaline, the nervures ferruginous; the femora dark rufo-testaceous, the tibiæ and tarsi ferruginous, and clothed with fulvous pubescence. Abdomen nigro-æneous, the margins of the segments pale testaceous, the base has a thin covering of pale fulvous pubescence, the second and third segments have a broad fascia of short, dense, fulvous pubescence, the fourth segment entirely covered and the fifth laterally clothed with a similar pubescence; the fifth in the middle has a fuscous pubescence, as well as the sides of the sixth segment.

Hab. Brazil (Para). (Coll. F. Smith.)

41. Tetralonia fulvipes.

Male. Length 5 lines.—Black, the pubescence on the head, thorax and legs fulvous, the clypeus, labrum, and the base and apex of the mandibles yellow; the middle of the latter ferruginous; the flagellum fulvous beneath; the tegulæ rufo-testaceous, the wings fulvo-hyaline, the nervures and base of the wings ferruginous, the legs ferruginous, the coxæ and base of the femora slightly fuscous; the abdomen has an æneous tinge, the apical margins of the segments broadly pale testaceous; the base of the abdomen has a little pale fulvous pubescence, the basal margin of the second segment has a band of pale pubescence, the fourth and fifth segments have on their apical margins laterally a fringe of pale pubescence, all the segments have on their middle some erect fuscous hairs.

Hab. Brazil. (Coll. F. Smith.)

42. Tetralonia nigro-ænea.

Female. Length 5 lines.—Head and thorax black, the face thinly clothed with a short griseous pubescence, on the cheeks it is of the same colour, but longer; the flagellum, except the three basal joints, fulvous beneath; the labrum testaceous, the mandibles ferruginous at their apex; the pubescence on the thorax and the anterior and intermediate legs black; on the metathorax and base of the abdomen it is fulvo-ochraceous; wings subhyaline, nervures and tegulæ ferruginous; the tarsi ferruginous beneath, as well as the claw-joint, the claws black; the posterior tibiæ have a scopa of pale fulvous pubescence, that on the tarsi beneath bright fulvous. Abdomen nigro-æneous, the second segment has a band at its base and another a little beyond the middle, a third on the third segment towards the base; the fourth a band on its apical margin and an oblique

stripe on each side from the middle of its base to its lateral margin, where it unites with the marginal band, all of pale yellowish-white pubescence; beneath, the margins of the segments rufo-testaceous, the apical segments fringed with fulvous pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

43. TETRALONIA THORACICA.

Female. Length 5 lines.—Black, the pubescence on the vertex and thorax above fulvous, the labrum has a fringe of fulvous hairs, and the face is thinly clothed with light fulvous; the pubescence on the legs sooty-black; the wings fulvo-hyaline and having a fuscous cloud at their apical margins, which also covers the upper portion of the marginal cell, the nervures and tegulæ ferruginous, the latter palest; the abdomen has a little fulvous pubescence at its base, the third and fourth segments have a very narrow white marginal fascia, the first subinterrupted; the apical segments have a little fuscous pubescence; beneath rufo-testaceous, the third and fourth segments having a pale marginal fringe.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

T. unifasciata is very probably the male of this species; they are from the same locality.

44. TETRALONIA UNIFASCIATA.

Male. Length 4 lines.—Black, the pubescence on the head, thorax and base of the abdomen fulvo-ochraceous, palest on the face; on the cheeks and thorax beneath it is griseous; the femora and tibiæ have also a griseous pubescence, that on the tarsi is very pale fulvous; the clypeus, labrum and mandibles yellow; the flagellum, except the two basal joints, fulvous beneath; the wings subhyaline, faintly clouded at their apical margins, the nervures ferruginous, the tegulæ pale ferruginous, as well as the apical joints of the tarsi. Abdomen, a fascia of silvery-white pubescence on the basal margin of the second segment; the following segments have on their apical margins laterally a little short white pubescence, frequently obliterated; the apex slightly fulvous, the apical segment having on each side a minute tooth.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

45. TETRALONIA SEXCINCTA.

Macrocera sexcincta, *St. Farg. Hym.* ii. 99. 12 ♀.

Hab. Brazil.

46. Tetralonia dispar.

Female. Length 5½ lines.—Black, the face covered with cinereous pubescence, intermixed with some long black hairs; clypeus convex, produced, the labrum covered with yellowish-white hairs, the flagellum fulvous beneath; the cheeks have a dense white pubescence. Thorax anteriorly clothed with sooty-black pubescence, posteriorly with fulvous; wings subhyaline, the legs fusco-ferruginous, their pubescence black, the apical joints of the tarsi ferruginous. Abdomen black and shining, at the base a little fulvous pubescence, and the sides towards the apex fringed with black pubescence; the margins of the basal segments beneath rufo-testaceous, the apical segments fringed with sooty-black hairs.

Hab. Peru.

47. Tetralonia marginata.

Macrocera marginata, *St. Farg. Hym.* ii. 109. 23.

Hab. Cayenne.

48. Tetralonia Cajennensis.

Macrocera Cajennensis, *St. Farg. Hym.* ii. 94. 6 ♂.

Hab. Cayenne; West Indies. (Coll. F. Smith.)

49. Tetralonia atrifrons. B.M.

Male. Length 5 lines.—Black, the pubescence on the face black, that on the margin of the vertex cinereous; the clypeus yellow at its anterior margin; the mandibles dark ferruginous, and having a yellow spot a little before their apex; the antennæ entirely black. The thorax above, the metathorax, two first segments of the abdomen, and a patch beneath the wings ochraceous; otherwise entirely black, excepting a few pale hairs on the anterior tibiæ behind, on the intermediate pair as well as on their tarsi, and on the posterior tibiæ and tarsi in front; the wings subhyaline, their nervures dark brown; the claw-joint of the tarsi slightly ferruginous, the claws black.

Hab. Chili.

50. Tetralonia melanura.

Tetralonia melanura, *Spin. Faun. Chili.* vi. 175. 2.

Length 5 lines.—Black, pubescent; thorax above and the first and second segments of the abdomen clothed with white pubescence; antennæ of the male longer than the body.

Hab. ——?

51. Tetralonia flavitarsis.

Tetralonia flavitarsis, *Spin. Faun. Chili.* vi. 174. 1.

Length 4½ lines.—Black, the pubescence fulvous; the tarsi and tegulæ subrufous; the abdomen having three fasciæ of white pubescence; the antennæ of the male longer than the body.

Hab. Chili.

52. Tetralonia melæna.

Tetralonia melæna, *Spin. Faun. Chili.* vi. 176. 4.

Length 5 lines.—The pubescence entirely black; wings hyaline, nervures black.

Hab. Chili.

53. Tetralonia Gayi.

Tetralonia Gayi, *Spin. Faun. Chili.* vi. 176. 3.

Length 5 lines.—The pubescence white; the labrum, legs and abdomen beneath black; the antennæ of the male shorter than the body.

Hab. Chili.

54. Tetralonia Lanierii.

Macrocera Lanierii, *Guér. Icon. Règ. Anim. Ins.* 455. t. 74. f. 7.

Hab. Cuba.

55. Tetralonia fulviventris. B.M.

Female. Length 7 lines.—Head and thorax black, the face has a thin pale fulvous pubescence, that on the disk of the thorax is similar; the labrum ciliated with bright fulvous hairs; the tegulæ rufo-piceous, wings fulvo-hyaline, the nervures ferruginous, the apical margins of the wings faintly clouded; the legs nigro-piceous, the tarsi ferruginous; the legs clothed with bright fulvous pubescence. Abdomen, the base of the segments black, the apical margins of the segments broadly rufo-testaceous, except the basal half of the first segment, the whole densely clothed with a short bright fulvous pubescence; beneath the margins of the segments rufo-piceous, ciliated with ferruginous hairs.

Hab. Mexico?

56. Tetralonia atrifrons.

Female. Length 7 lines.—Black, the pubescence on the head entirely black. The thorax above, and the basal segment of the abdomen, clothed with ochraceous pubescence, on the other

parts it is entirely black; the wings fusco-hyaline, their nervures fusco-ferruginous; the anterior tarsi brownish beneath, the claws ferruginous.

Hab. North Carolina. (Coll. W. W. Saunders, Esq.)

57. TETRALONIA BICOLOR.

Macrocera bicolor, *St. Farg. Hym.* ii. 113. 29 ♀.

Hab. ——?

58. TETRALONIA BARBATA.

Macrocera barbata, *St. Farg. Hym.* ii. 112. 28 ♂.

Hab. ——?

59. TETRALONIA ATRA.

Macrocera atra, *St. Farg. Hym.* ii. 112. 26 ♂.

Hab. ——?

60. TETRALONIA NIGRICORNIS.

Macrocera nigricornis, *St. Farg. Hym.* ii. 107. 21 ♂.

Hab. ——?

61. TETRALONIA CINGULATA.

Macrocera cingulata, *St. Farg. Hym.* ii. 105. 18 ♂.

Hab. ——?

Genus 45. MELISSODES.

Melissodes, *Latr. Règ. Anim.* v. 354 (1829).
Macrocera, *Say, Bost. Journ.* i. 403 (1837).

The maxillary palpi 4-jointed, the labial palpi 4-jointed. The ocelli placed in a line on the vertex, the antennæ elongate in the males. The anterior wings having one marginal and three submarginal cells.

1. MELISSODES PRUINOSA. B.M.

Macrocera pruinosa, *Say, Bost. Journ.* i. 405. 3.

Hab. United States (Mount Pleasant, Ohio).

2. MELISSODES RUSTICA.

Macrocera rustica, *Say, Bost. Journ.* i. 406. 4.

Hab. North America (Indiana).

This may possibly be the species described as *M. denticulata,*

but as the teeth which arm the apex of the abdomen are not mentioned by Say, it becomes doubtful.

3. Melissodes obliqua. B.M.

Macrocera obliqua, *Say*, *Bost. Journ.* i. 403. 1.

Hab. North America (Indiana).

4. Melissodes nigra.

Macrocera nigra, *St. Farg. Hym.* ii. 112. 27.

Hab. North America. (Coll. F. Smith.)

5. Melissodes desponsa. B.M.

Female. Length 6 lines.—Black, the pubescence on the head and thorax ochraceous; the flagellum, except the three basal joints, testaceous beneath, the clypeus strongly punctured and having a little dark fuscous pubescence; the apex of the mandibles pale testaceous yellow; the wings subhyaline, the nervures ferruginous; the pubescence on the body and legs beneath entirely black; the base of the abdomen has a little ochraceous pubescence, beyond which it is black, as it is also on the anterior and intermediate legs above, on the posterior tibiæ, and at the base of the first joint of the posterior tarsi above, pale fulvous, the claw-joint of all the tarsi dark ferruginous; the margins of the segments of the abdomen beneath rufo-testaceous.

Hab. North America (Ohio).

Var. The wings fuscous, and the fourth segment of the abdomen having on its apical margin laterally, a short white fringe. This is probably the female of "*Americana*," both sexes having been received from the same locality.

6. Melissodes atriventris. B.M.

Male. Length 6 lines.—Black, the clypeus and labrum yellow, the pubescence on the head and thorax ochraceous, that on the face and metathorax palest; the legs have a similar pubescence, the apical joints of the tarsi rufo-testaceous; the wings subhyaline, the nervures testaceous, the tegulæ pale testaceous; the base of the abdomen clothed with pale ochraceous pubescence, beyond which it is entirely black, beneath it is of the same colour; the entire apical margins of the segments rufo-testaceous, the abdomen having a slight æneous tinge.

Hab. North America?

7. Melissodes denticulata. B.M.

Male. Length 4 lines.—Black, the clypeus yellow, and having its base narrowly black; the mandibles yellow at their tips; the flagellum fulvous beneath, except the two basal joints; the head and thorax have a thin hoary pubescence, as well as the legs, the apical joints of the tarsi ferruginous; the wings hyaline, their nervures fuscous. Abdomen ovate, and having a thin hoary pubescence at the base and sides; on the second, third, fourth and fifth segments are indistinct bands of the same coloured pubescence, usually more or less interrupted on the second and third; at the lateral margins of the fifth segment, at its base, a short angular acute tooth and a smaller one at the base of the sixth segment; the lateral margins of all the segments slightly testaceous.

Hab. United States.

8. Melissodes senilis.

Female. Length 4½ lines.—Black, the pubescence of the head and thorax cinereous; the legs nigro-piceous, the apical joints of the tarsi ferruginous; the anterior and intermediate tarsi have fuscous pubescence, on the posterior tibiæ and tarsi it is pale fulvous, on the basal joint of the posterior tarsi within it is fuscous; the wings subhyaline, the nervures ferruginous. Abdomen very smooth and shining, at the base a little cinereous pubescence, the second segment has on its basal margin laterally, a line of white pubescence attenuated within; a similar line in the middle; the third and fourth segments have a band on their basal margin, attenuated in the middle; the fifth and sixth are clothed with fuscous pubescence; beneath, the apical margins are ciliated in the middle with fuscous pubescence, and on the sides with white.

Hab. North America (Mount Pleasant, Ohio).

This is very probably the female of *M. denticulata*; both are from the same locality and have a close specific resemblance.

9. Melissodes nigripes. B.M.

Female. Length 7 lines.—Black, the head and thorax covered with ochraceous pubescence, that on the latter palest; the legs and their pubescence black; wings subhyaline, their nervures ferruginous; the tegulæ pale testaceous; the abdomen and its pubescence entirely black; sometimes a little ochraceous pubescence at the base and the apical margins rufo-testaceous.

Male. Length 5½ lines.—Very closely resembling the female; the clypeus yellow; the flagellum pale fulvous or yellow beneath,

except the two basal segments; the claws ferruginous: otherwise as in the other sex.

Hab. United States.

10. Melissodes Pennsylvanica.

Macrocera Pennsylvanica, *St. Farg. Hym.* ii. 97. 9 ♂.

Hab. Pennsylvania.

11. Melissodes Philadelphica.

Macrocera Philadelphica, *St. Farg. Hym.* ii. 110. 24 ♂.

Hab. Pennsylvania.

12. Melissodes Americana.

Macrocera Americana, *St. Farg. Hym.* ii. 92. 4 ♂.

Hab. Carolina. (Coll. F. Smith.)

13. Melissodes dentiventris. B.M.

Male. Length 5½ lines.—Black, the clypeus, and mandibles at their apex yellow; the flagellum, except the two basal joints, fulvous beneath, and fuscous above; the pubescence on the head, thorax and legs fulvous; the wings subhyaline, their nervures ferruginous; the legs dark rufo-testaceous, the apical joints of the tarsi ferruginous; the base of the abdomen clothed with fulvous pubescence, the second segment has a narrow band of short pubescence of the same colour, and on each side about the middle a short line of the same; the remaining segments have a scattered black pubescence with which their sides are fringed; beneath, the pubescence is black; at the extreme lateral margins of the fifth and sixth segments is a minute tooth or spine, the apical segment above rufo-testaceous.

Hab. Georgia.

14. Melissodes manipularis. B.M.

Male. Length 4½ lines.—Black, the clypeus and tips of the mandibles yellow, the flagellum, except the two basal joints, fulvous beneath, and fuscous above; the face clothed with white pubescence, on the vertex it is pale fulvous, as it is also on the disk of the thorax; beneath, and on the sides it is paler, as well as that which clothes the metathorax; the legs rufo-testaceous, the apical joints of the tarsi pale testaceous, the claws ferruginous; the wings hyaline, the nervures and tegulæ ferruginous. Abdomen, the base thinly clothed with pale pubescence; the second segment has a band of cinereous pubescence at its basal

margin, and a second a little before its apex; the third and fourth segments have a band in the middle, which on each side is slightly oblique; the fifth has a band at its base and on each side a short acute tooth bent inwards, the seventh segment has also a small tooth on each side at its base.

Hab. Georgia.

15. MELISSODES TERMINATA. B.M.

Female. Length 5½ lines.—Black, the labrum and a spot at the tips of the mandibles yellow; the flagellum, except the two basal and two or three apical joints, fulvous; the pubescence on the head, thorax and base of the abdomen cinereous, the wings subhyaline, their apex faintly clouded; the legs dark rufo-testaceous, the anterior femora have a long fringe of white pubescence, the apical joints of the tarsi pale ferruginous; the pubescence on the anterior and intermediate legs cinereous, that on the posterior pair dense, short, and black. Abdomen covered with fine shallow punctures, the apical margins of the segments slightly rufo-testaceous; the apex adorned with short golden pubescence, covering the two apical and the margin of the fourth segment. In old or worn specimens the golden pubescence on the abdomen becomes silvery or white.

Hab. Venezuela.

16. MELISSODES HÆMORRHOIDALIS.

Female. Length 5½ lines.—Black, the head shining, rather strongly punctured, the clypeus having a central longitudinal depression, and the face a thinly scattered sooty-black pubescence; the labrum densely covered with pale fulvous pubescence; the flagellum, except the two basal joints, fulvous beneath; the thorax shining on the disk, the punctures scattered, thinly clothed with sooty-black pubescence, most dense on the sides and beneath, the pubescence on the anterior and intermediate legs black, that on the posterior tibiæ and tarsi pale fulvous, the femora beneath fusco-ferruginous; the wings fulvo-hyaline, the nervures ferruginous, the tegulæ slightly rufo-testaceous. Abdomen, fusco-ferruginous at the base, the apical margin of the second segment having a yellowish tinge particularly towards the sides, the rest of the segments of a reddish-yellow, the third and fourth segments at their basal margins laterally slightly fuscous, the four apical segments covered with pale fulvous pubescence; the abdomen entirely of a reddish-yellow beneath, the segments fringed with fulvous pubescence.

Hab. South America. (Coll. F. Smith.)

17. Melissodes Æthiops.

Male. Length 5½ lines.—Black, the pubescence entirely black, except a little on the cheeks, sides of the face, and a fringe on the segments of the abdomen beneath, which is of a dirty white; the pubescence dense on the thorax, legs, and base of the abdomen; the wings subhyaline, faintly clouded at their apex, the nervures black, the claws, tips of the mandibles, and the anterior margin of the clypeus narrowly, ferruginous; the labrum yellow; the apex of the abdomen has a little fulvous pubescence. The pubescence of this insect is beautifully plumose or feathered.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

18. Melissodes fulvipes. B.M.

Male. Length 5 lines.—Black, the labrum, clypeus and base of the mandibles yellow, the apical half of the latter ferruginous; the flagellum fulvous beneath, except the two basal segments; the pubescence on the head, thorax and legs fulvous, being pale at the sides of the metathorax; the legs fulvous; the tegulæ fulvo-testaceous, the wings fulvo-hyaline, the nervures and tegulæ rufo-testaceous. Abdomen fusco-ferruginous, the apical margins of the segments rufo-testaceous; the base clothed with pale fulvous pubescence, the second segment has a band of short scaly pubescence at its basal margin, which is much narrowed in the middle, the third segment has a band at its base, and the following at their apical margins; the abdomen rufo-testaceous beneath.

Hab. Cayenne.

19. Melissodes rufo-dentata.

Male. Length 4¼ lines.—Black, the clypeus and base of the mandibles yellow; the labrum cream-coloured and the flagellum fulvous beneath; the pubescence on the vertex and disk of the thorax, fulvo-ochraceous; that on the sides of the metathorax is paler; on the thorax beneath and on the cheeks it is cinereous; the wings fulvo-hyaline, the nervures and tegulæ pale ferruginous, all the tibiæ and tarsi of the same colour; the claws black. Abdomen fusco-ferruginous, the apical margins of the segments palest, the whole having a slight metallic or æneous tint; the second segment has a band of short pale ochraceous pubescence at its basal margin, and another a little beyond the middle; the three following segments have a single band towards their base; the apical segment is ferruginous in the middle, and has a small tooth of the same colour on each side; beneath, the apical margins of the segments are broadly rufo-testaceous.

Hab. St. Vincent's. (Coll. F. Smith.)

20. Melissodes Fonscolombei.

Melissodes Fonscolombei, *Romand, Mag. Zool.* (1841) t. 70. f. 1 *a*, 1 *b*, ♂ & ♀.

Hab. Chili.

Genus 46. XENOGLOSSA.

Xenoglossa, *F. Smith's MSS*

Head transverse, stemmata very large, approximating, placed in a curve on the vertex. The mentum of about equal length with the two basal joints of the labial palpi, the latter 4-jointed, the two apical joints minute, placed at the apex of the second joint; the paraglossæ setiform, pubescent, nearly as long as the labium; the maxillary palpi 5-jointed; the basal joint incrassate, of the same length as the second joint, the third joint of the same length as the second, the fourth joint shorter than the third, the fifth very minute. Antennæ of about equal length in the two sexes, the flagellum subclavate. The superior wings having one marginal and two submarginal cells; the marginal as long as the three submarginal ones united; the second submarginal cell oblique-quadrate, the third narrowed towards the marginal; the posterior tibiæ slightly dilated and having a long loose scopa; the claws bifid; the intermediate legs of the males simple.

1. Xenoglossa fulva. B.M.

Female. Length 8 lines.—Entirely bright fulvous, and clothed with fulvous pubescence, the flagellum fuscous; the wings fuscous, the nervures black, the tips of the claws black, the pubescence on the tarsi beneath ferruginous; the pubescence on the abdomen short and velvety, that on the basal segment is long, as well as that on the thorax.

Male.—Closely resembling the female, but having the clypeus and labrum yellow, the base of the mandibles is also yellow. The apical segment of the abdomen subquadrate, having on each side an elevated carina, and a central abbreviated one reaching the apex; above subrugose, beneath smooth and shining.

Hab. Mexico (Puebla).

Genus 47. OXÆA.

Oxæa, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 262.

1. Oxæa flavescens. B.M.

Oxæa flavescens, *Klug, Berlin Mag.* p. 262. t. 7. f. 1 (1807) ♂.
Latr. Gen. Crust. Ins. iv. p. 172.
Blanch. Hist. Nat. Ins. iii. 411.

Female. Length 8 lines.—Head and thorax black, smooth and shining; the face has a pale yellow pubescence, that on the vertex and on the disk of the thorax fulvo-ochraceous; the wings subhyaline, their nervures testaceous; the legs pale fulvo-testaceous, and clothed with short fulvo-ochraceous pubescence, the posterior pair having a dense floccus on the posterior femora at their base, and the tibiæ having a dense scopa. Abdomen bright green, the base, sides and apex having a scattered yellow pubescence; beneath fulvo-testaceous, the margins of the segments thickly fringed with pale fulvous pubescence; the abdomen above is finely shagreened, the apical margins smooth and shining.

Hab. Brazil.

2. Oxæa festiva.

Female. Length 9 lines.—Head and thorax black, smooth and shining; the clypeus has a few scattered punctures, on each side of which is a little short dense white pubescence; the mandibles elongate, arcuate, the labrum having a central carina; the mandibles rufo-piceous, fringed below with short ferruginous hairs. Thorax, the sides of the disk have a short velvety pubescence, the wings smoky-hyaline, the nervures and tegulæ black; the legs fulvo-testaceous, densely clothed with short fulvo-ochraceous pubescence, the posterior pair having a dense floccus at the base of the femora beneath, and the tibiæ a dense scopa of short pubescence. Abdomen brilliant green, very closely punctured, most strongly so towards the base, the apical margins of the segments smooth and shining, and having a brilliant golden effulgence; the fifth and sixth segments black, clothed with black pubescence; beneath rufo-testaceous, the margins of the apical segments fringed with ferruginous hairs.

Hab. Para (W. W. Bates). (Coll. F. Smith.)

Genus 48. MELITTURGA.

Eucera, pt., *Latr. Gen. Crust. Ins.* i. t. 14. f. 14.
Melitturga, *Latr. Gen. Crust. Ins.* iv. 176.

1. Melitturga clavicornis. B.M.

Eucera clavicornis, *Latr. Gen. Crust. Ins.* i. t. 14. f. 9.
Melitturga clavicornis, *Latr. Gen. Crust. Ins.* iv. 176.
Guér. Icon. Règ. Anim. Ins. 455. t. 74. f. 3.
St. Farg. Hym. ii. 172. 1 ♂ ♀.
Eversm. Bull. Mosc. xxv. 125. 1.

Hab. South of France.

2. Melitturga fervens.

Melitturga fervens, *St. Farg. Hym.* ii. 143. 3 ♂.
Lucas, Explo. Sc. Algér. iii. 166. 50.

Hab. Algeria.

3. Melitturga Oraniensis.

Melitturga Oraniensis, *St. Farg. Hym.* ii. 142. 2 ♂.
Lucas, Explo. Sc. Algér. iii. 165. 49. t. 4. f. 7.

Hab. Algeria.

Genus 49. SAROPODA.

Apis, pt., *Panz. Faun. Germ.* fasc. 56 (1800).
Heliophila, *Klug*, (olim) *Illig. Mag.* vi. 227 (1807).
Saropoda, *Latr. Gen. Crust. et Ins.* iv. 179 (1809).
Anthophora, pt., *St. Farg. Hym.* ii. 25 (1841).

1. Saropoda bimaculata. B.M.

Apis bimaculata, *Panz. Faun. Germ.* 55. 17 ♀.
Kirby, Mon. Ap. Angl. ii. 286. 63.
Apis rotundata, *Panz. Faun. Germ.* 56. 9 ♂.
Kirby, Mon. Ap. Angl. ii. 291. 66.
Anthophora rotundata, *Blanch. Hist. Nat. des Ins.* iii. 406.
Anthophora bimaculata, *Spin. Ins. Lig.* fasc. 1. 127. 6.
St. Farg. Hym. ii. 36. 11.
Saropoda bimaculata, *Latr. Gen. Crust. et Ins.* iv. 177.
Curtis, Brit. Ent. viii. t. 361.
Smith, Zool. iii. 891. 1.
Heliophila bimaculata, *Klug, Illig. Mag.* vi. 227.

Hab. France; Germany; Britain.

2. Saropoda fulva.

Saropoda? fulva, *Eversm. Bull. Mosc.* xxv. 105. 1.

Hab. Russia.

3. Saropoda tenella.

Saropoda tenella, *Klug, Symb. Phys.* dec. v. t. 50. f. 6 ♀.

Hab. Egypt.

4. Saropoda byssina.

Saropoda byssina, *Klug, Symb. Phys.* dec. v. t. 50. f. 4.

Hab. Egypt.

5. Saropoda lutulenta.

Saropoda lutulenta, *Klug, Symb. Phys.* dec. v. t. 50. f. 5 ♀.

Hab. Egypt.

6. Saropoda bombiformis. B.M.

Female. Length 6 lines.—Black, the scape of the antennæ, clypeus and labrum of an orange-yellow, the mandibles yellow, their tips ferruginous; the flagellum rufo-piceous beneath. The entire insect clothed with a short rich fulvous pubescence, having a golden effulgence on the abdomen; the legs fulvo-ferruginous, the posterior femora more or less fuscous; wings fusco-hyaline, the nervures black, the tegulæ pale rufo-testaceous; the posterior tibiæ and the basal joint of the tarsi fringed with black pubescence, the claws black. Abdomen, the base of the second segment naked, forming a black band, the apical margins of the third and fourth segments and the entire apical ones fulvous.

Male: var. *α*. The legs entirely dark fuscous, and the posterior tarsi black.

Male.—This sex is coloured precisely the same as the female.

Hab. Australia (Richmond River).

7. Saropoda latizona.

Saropoda latizona, *Spin. Ann. Soc. Ent. Fr.* vii. 543. 82 (1838).

Hab. Egypt.

8. Saropoda humilis.

Saropoda humilis, *Spin. Ann. Soc. Ent. Fr.* vii. 544 (1838).

Hab. Africa.

9. Saropoda nigrilabris.

Saropoda nigrilabris, *Spin. Ann. Soc. Ent. Fr.* vii. 543 (1838).

Hab. Africa.

Genus 50. HABROPHORA.

(*F. Smith's MSS.*)

The labial palpi 4-jointed, the basal joint thrice the length of the second, the third and fourth minute, inserted at the side and near the apex of the second joint; the mentum about one-third shorter than the labium.

The maxillary palpi 6-jointed, the basal joint scarcely half the length of the second, the third a little longer than the first; the

three apical joints each in succession shorter than the preceding, the apical joint minute.

The superior wings with one marginal and three submarginal cells, the second and third submarginal cells narrowed towards the marginal, the first recurrent nervure *uniting with the second transverse cubital nervure.*

The flagellum of the antennæ of the male one-third longer than that of the female, but having the basal joint of the flagellum shorter than in the other sex.

This genus in many particulars agrees with that of *Anthophora*; the relative proportions of the mentum, labium and palpi are however different, but the neuration of the wings precludes the possibility of placing it in that genus.

1. Habrophora zonatula. B.M.

Female. Length 6½ lines.—Black; the face clothed with fulvous pubescence, pale at sides, sparing on the clypeus, and darkest on the vertex; the labrum densely covered with yellowish-white pubescence; the apex of the mandibles fulvo-testaceous. The thorax and basal segment of the abdomen densely clothed with fulvous pubescence above, beneath the former it is paler; the legs ferruginous, densely clothed above with fulvous pubescence. the scopa on the posterior tibiæ pale, on the tarsi beneath it is ferruginous; the wings subhyaline, the nervures ferruginous, the tegulæ pale rufo-testaceous. Abdomen; the apical margins of the segments have fasciæ of short yellowish-white pubescence; the fifth and sixth segments have a fringe of longer pubescence, which is white at the sides and fulvous in the middle.

Male.—Closely resembles the female, but having the clypeus, a triangular spot above it, the face on each side, the scape in front, the labrum and mandibles, yellow; the tips of the latter and the anterior margin of the clypeus ferruginous; at the base of the clypeus are two quadrate spots united at the base, but not touching the base of the clypeus. The pubescence of the thorax, abdomen and legs as in the other sex; the anterior coxæ armed with an elongate bent spine, which is slightly recurved and thickened at the apex, terminating in an acute point; all the femora incrassate; the basal joint of the anterior tarsi have a broadly dilated quadrate process occupying the apical half behind; this process has a row of short curved teeth along its apical margin; the second joint is armed beneath with an acute tooth; the basal joint of the posterior tarsi is produced at its apex beneath; this process is rounded at the extremity.

Hab. Albania.

2. Habrophora ezonata. B.M.

Female. Length 7 lines.—Black, the face has a cinereous pubescence thinly scattered over the clypeus, but dense on each side of the face, that on the vertex is black, the labrum has a dense tuft of white pubescence, and the cheeks a dense beard of the same colour. The thorax and basal segment of the abdomen above, densely clothed with fulvo-ochraceous pubescence; the anterior femora have a long thick fringe which is formed by a mixture of pale and dark fuscous pubescence, the intermediate and posterior femora are fringed with fuscous pubescence, and above the legs have a short pubescence of the same colour, except the scopa on the posterior tibiæ, which is glittering yellowish-white. Abdomen; the second and third segments have a very short black pubescence, on the fourth it is silvery-white, very short and having some long white hairs intermixed, its apical margin has a dense white fringe; the sides of the following segment are similarly adorned, in the middle it is fuscous, as it is also on the apical segment.

Male.—Closely resembles the female, but the clypeus and a transverse line above, the face on each side, the scape in front and the basal half of the mandibles yellow; the apical half of the latter ferruginous; the anterior coxæ armed with an elongate filiform spine, obtuse at its apex and having a brush-like tuft of white hair at the extremity: these spines as well as the legs are ferruginous; the thorax beneath, the coxæ and trochanters covered with long white pubescence; the tibiæ and tarsi have a white pubescence above, the posterior femora having some long fuscous pubescence within; the basal joint of the posterior tarsi broadly dilated, angulated beneath, convex exteriorly, concave within. The pubescence of the abdomen longer, but coloured as in the female, the apical segment fringed with short black hairs.

Hab. Albania.

Note.—The name *Habrophora*, as I have lately ascertained, having been preoccupied by Erichson in Coleoptera, *Habropoda* must be substituted.

Genus 51. ANTHOPHORA.

Apis, pt., *Linn. Syst. Nat.* 953 (1766).
Podalirius, *Latr.* (olim) *Hist. Nat. Cr. et Ins.* iii. p. 378 (1802) (Saropoda, Anthophora, Centris).
Anthophora, *Latr. Hist. Nat. Cr. et Ins.* xiv. 45. (1804) (Saropoda).
Megilla, pt., *Fabr. Syst. Piez.* p. 328 (1804).
Lasius, pt., *Jur. Hym.* (1807).

1. ANTHOPHORA RETUSA. B.M.

Apis retusa, *Linn. Faun. Suec.* 1689; *Syst. Nat.* i. 954. 8, et *Cab. Mus. Linn. Soc.* ♀.
Apis Haworthana, *Kirby, Mon. Ap. Angl.* ii. 307. 70 ♂.
Anthophora Haworthana, *Curtis, Brit. Ent.* viii. t. 357 ♂.
Smith, Zool. iii. 895. 2 ♂ ♀.
Anthophora retusa, *St. Farg. Hym.* ii. 69. 38.
Megilla retusa, *Nyland. Revis. Ap. Boreal.* p. 265. 2.

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

2. ANTHOPHORA ACERVORUM. B.M.

Apis acervorum, *Fabr. Syst. Ent.* p. 382. 21 ♀ (nec *Linn.*); *Ent. Syst.* ii. 322. 36.
Apis Hispanica, *Panz. Faun. Germ.* 55. 6 ♂? (nec *Fabr.*).
Apis retusa, *Kirby, Mon. Ap. Angl.* ii. 296. 69 ♂ ♀.
Megilla acervorum, *Fabr. Syst. Piez.* p. 328. 2.
Nyland. Revis. Ap. Boreal. p. 266. 2.
Anthophora retusa, *Blanch. Hist. Nat. des Ins.* iii. 406. 4. t. 7. f. 2 ♂.
Smith, Zool. iii. 894. 1.

Hab. Britain; France; Germany; Denmark.

3. ANTHOPHORA PILIPES. B.M.

Apis pilipes, *Fabr. Ent. Syst.* ii. 326 ♂.
Apis plumipes, *Pallas, Spicil. Zool.* i. fasc. 9. 24. t. 1. f. 14?
Megilla pilipes, *Fabr. Syst. Piez.* p. 329. 6; p. 326. 54.
Nyland. Revis. Ap. Boreal. p. 266. 3.
Anthophora pilipes, *St. Farg. Hym.* ii. 57. 31 ♂ ♀.
Blanch. Hist. Nat. des Ins. iii. 406. 1.
Lucas, Explo. Sc. Algér. iii. 147. 13.
Anthophora hirsuta, *Eversm. Bull. Mosc.* xxv. 109. 4.

Hab. France; Italy; Germany.

4. ANTHOPHORA PARIETINA. B.M.

Apis parietina, *Fabr. Ent. Syst.* ii. 323. 38.
Megilla parietina, *Fabr. Syst. Piez.* p. 329. 3.
Nyland. Ap. Boreal. p. 244; *Revis. Ap. Boreal.* p. 267. 4.
Anthophora parietina, *Latr. Ann. Mus. d'Hist. Nat.* iii. 252.
Spin. Ins. Lig. fasc. 1. p. 126.
St. Farg. & Serv. Ency. Méth. x. 798. 2.
St. Farg. Hym. ii. 79. 46.

Hab. France; Italy; Denmark; Sweden.

5. ANTHOPHORA NIDULANS. B.M.

Apis nidulans, *Fabr. Ent. Syst.* ii. 330. 72 ♀.
Centris nidulans, *Fabr. Syst. Piez.* p. 357. 11.
Apis quadrifasciata, *De Vill. Entom.* iii. 319. 90.
Anthophora nidulans, *St. Farg. Hym.* ii. 27. 2 ♂ ♀.
Brullé, Hist. Nat. Il. Canar. iii. p. 84. 8.
Lucas, Explo. Sc. Algér. iii. 142. 4.

Hab. France; Madeira; Algeria; Albania; Italy.

The specimens of this species from Madeira have the markings, as well as the pubescence, similarly distributed, but the latter is more or less fulvous.

6. ANTHOPHORA FURCATA. B.M.

Apis furcata, *Panz. Faun. Germ.* 56. 8 ♂.
Kirby, Mon. Ap. Angl. ii. 288. 64. t. 17. f. 5, 6.
Anthophora furcata, *St. Farg. Hym.* ii. 82. 49.
Eversm. Bull. Mosc. xxv. 111. 6.
Saropoda furcata, *Smith, Zool.* iii. 893. 3.
Megilla furcata, *Nyland. Ap. Boreal.* p. 245. 4.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

7. ANTHOPHORA QUADRIMACULATA. B.M.

Apis quadrimaculata, *Panz. Faun. Germ.* 56. 7 ♂.
Megilla quadrimaculata, *Fabr. Syst. Piez.* p. 331. 14.
Nyland. Ap. Boreal. p. 244.
Apis vulpina, *Kirby, Mon. Ap. Angl.* ii. 290. 65 ♂ (nec *Panz.*).
Apis subglobosa, *Kirby, Mon. Ap. Angl.* ii. 295. 68 ♀.
Anthophora quadrimaculata, *St. Farg. Hym.* ii. 84. 51 ♂ (*type in Coll. Westw.*).
Eversm. Bull. Mosc. xxv. 110. 5.
Anthophora mixta, *St. Farg. Hym.* ii. 85. 52 ♀ (*type in Coll. Westw.*).
Saropoda vulpina, *Smith, Zool.* iii. 892. 2 ♂ ♀.

Hab. France; Germany; Denmark; Sweden.

8. ANTHOPHORA ALBIGENA.

Anthophora albigena, *St. Farg. Hym.* ii. 28. 3 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 142. 5. t. 1. f. 2.

Hab. France; Sicily; Algeria.

9. Anthophora vara.

Anthophora vara, *St. Farg. Hym.* ii. 43. 17 ♂.

Hab. France (Paris).

10. Anthophora binotata.

Anthophora binotata, *St. Farg. Hym.* ii. 38. 12 ♂.

Hab. France (Paris; Lyons).

11. Anthophora squalida.

Anthophora squalida, *St. Farg. Hym.* ii. 53. 27.

Hab. France (Paris).

12. Anthophora pubescens. B.M.

Apis pubescens, *Fabr. Ent. Syst.* ii. 336. 95.
Anthophora pubescens, *Fabr. Syst. Piez.* p. 377. 20.
St. Farg. Hym. ii. 54. 28 ♀.

Hab. Italy; Algeria (Oran).

13. Anthophora podagra.

Anthophora podagra, *St. Farg. Hym.* ii. 44. 18 ♂.

Hab. France (Montpellier).

14. Anthophora garrula.

Megilla garrula, *Germar, Faun. Ins. Europ.* fasc. 3. t. 14.

Hab. Germany.

15. Anthophora femorata.

Anthophora femorata, *Latr. Gen. Crust. Ins.* iv. 176.
Panz. Faun. Germ. 105. 18 ♂. 19 ♀.
St. Farg. Hym. ii. 45. 19.

Hab. France (Montpellier; St. Séver); Germany. (Coll. W. W. Saunders, Esq.)

16. Anthophora flabellifera.

Anthophora flabellifera, *St. Farg. Hym.* ii. 40. 14 ♂.

Hab. Lyons; Algeria (Oran). (Coll. W. W. Saunders, Esq.)

17. Anthophora dubia. B.M.

Female. Length 6 lines.—Black, the face clothed with pale pubescence, the clypeus and labrum coarsely punctured, the disk

of the thorax clothed with black pubescence, enclosed by a circle of short fulvous pubescence; beneath, the pubescence is black; the fringe of the femora intermixed with pale hairs; the legs dark rufo-piceous, the posterior tibiæ and the basal joint of the tarsi covered with short fulvous pubescence; the wings fusco-hyaline, the nervures black. Abdomen clothed with a dense short fulvous pubescence, which is brightest on the two basal segments, on the third and following segments it becomes ochraceous, the fifth segment has a little bright fulvous pubescence on the marginal fringe, on the apical one it is ferruginous.

Hab. South of France.

18. Anthophora Dufourii.

Anthophora Dufourii, *St. Farg. Hym.* ii. 75. 43.

Hab. France; Spain.

19. Anthophora crassipes.

Anthophora crassipes, *St. Farg. Hym.* ii. 41. 15 ♂.

Hab. France (St. Germains).

20. Anthophora crinipes. B.M.

Female. Length 5 lines.—Black, clothed with a pale ochraceous pubescence, inclining to hoary-gray on the face, metathorax, femora beneath, and on the posterior tibiæ above; at the apex of the femora and tibiæ is a little bright yellow or golden pubescence; the apical margins of the segments of the abdomen are pale testaceous, and have a fringe of nearly white pubescence; the abdomen beneath and the legs are rufo-piceous; the fourth and fifth ventral segments have a mixture of ferruginous hairs with the pale pubescence which fringes them; the wings subhyaline, the nervures ferruginous; the apical joints of all the tarsi ferruginous; the flagellum of the antennæ rufo-piceous beneath.

Male.—Rather smaller than the female, clothed with similar pubescence; the clypeus, a transverse line above, the labrum and scape in front, yellow; the margins of the labrum and two round spots at the base fuscous. The intermediate legs elongate, the basal joint of the tarsi dilated towards the apex, and having on its apical half in front a short fringe of black pubescence; the entire joint as well as the tibiæ behind covered with a thin long pale pubescence; the apical joint of the tarsi black, and having a short fringe on each side of black pubescence.

Hab. Italy.

21. Anthophora balneorum.

Anthophora balneorum, *St. Farg. Hym.* ii. 81. 48.

Hab. The Pyrenees.

22. Anthophora fulvipes.

Anthophora fulvipes, *Eversm. Bull. Mosc.* xix. 438 ; xxv. 115. 12.

Hab. Russia.

23. Anthophora atricilla.

Anthophora atricilla, *Eversm. Bull. Mosc.* ii. 437. 2. t. 4. f. 3 ; xxv. 116. 16.

Hab. Russia.

24. Anthophora Ireos.

Apis Ireos, *Pallas, Iter.* ii. 731. 93 ♂.
Fabr. Ent. Syst. ii. 331. 75, and *Cab. Mus. Dom. Banks.*
Anthidium Ireos, *Fabr. Syst. Piez.* p. 366. 4.
Anthophora Ireos, *St. Farg. & Serv. Ency. Méth.* x. 798. 4.

Hab. Russia.

25. Anthophora lepida.

Anthophora lepida, *Eversm. Bull. Mosc.* ii. 439. 5 ; xxv. 116. 14.

Hab. Russia.

26. Anthophora vetula.

Anthophora senilis, *Eversm. Bull. Mosc.* xix. 438. 3 (nec *Illig.*).
Anthophora vetula, *Eversm. Bull. Mosc.* xxv. 117. 17.

Hab. Russia.

27. Anthophora personata.

Megilla personata, *Illig. Mag.* v. 22.
Waltl, Reise. p. 209.
Eversm. Bull. Mosc. xxv. 108. 1.

Hab. Russia.

28. Anthophora albifrons.

Anthophora albifrons, *Eversm. Bull. Mosc.* xxv. 115. 13.

Hab. Russia.

29. Anthophora pedata.

Anthophora pedata, *Eversm. Bull. Mosc.* xxv. 116. 15.
Hab. Russia.

30. Anthophora fulva.

Anthophora fulva, *Eversm. Bull. Mosc.* xxv. 114. 11.
Hab. Russia.

31. Anthophora dubia.

Anthophora dubia, *Eversm. Bull. Mosc.* xxv. 114. 10.
Hab. Russia.

32. Anthophora segnis.

Anthophora segnis, *Eversm. Bull. Mosc.* xxv. 113. 9.
Hab. Russia.

33. Anthophora cinerea.

Anthophora cinerea, *Eversm. Bull. Mosc.* xxv. 112. 7.
Hab. Russia.

34. Anthophora quadricincta.

Anthophora quadricincta, *Eversm. Bull. Mosc.* xxv. 108. 2.
Hab. Russia.

35. Anthophora cognata.

Female. Length 5 lines.—Black, the clypeus and labrum have a glittering white pubescence, on the vertex it is fulvous intermixed with fuscous; the anterior margin of the clypeus, and an angular shape uniting with it, in the middle, the labrum and mandibles, yellow; a narrow line on the margin of the clypeus, a minute spot on each side of the labrum at the base, black; the tips of the mandibles ferruginous. Thorax, clothed above with a dense fulvo-ochraceous pubescence, the tips of the hairs fuscous; the wings subhyaline, nervures fuscous, the tegulæ pale testaceous; the legs fusco-ferruginous, the pubescence beneath black and sparing, above densely clothed with a yellowish-white pubescence, the basal joint of the tarsi beneath has an obscure ferruginous pubescence. Abdomen, the apical margins of the segments have a fascia of short fulvo-ochraceous pubescence, the fasciæ uniting at the extreme lateral margins; the second

and third segments have in the middle an abbreviated line of pubescence which unites with the marginal fasciæ; the apex of the abdomen fuscous.

This species bears a strong resemblance to the *Saropoda bimaculata*.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

36. Anthophora intermedia. B.M.

Anthophora zonata, *Brullé, Expéd. Sc. de Morée*, iii. 331. 737. (nec *Fabr.*).
Anthophora intermedia, *St. Farg. Hym.* ii. 64. 35.

Hab. Morea; Algeria (Oran).

37. Anthophora affinis. B.M.

Anthophora affinis, *Brullé, Expéd. Sc. de Morée*, iii. 330. 736.
St. Farg. Hym. ii. 61. 33.
Lucas, Explo. Sc. Algér. iii. 148. 15.

Hab. Morea; Algeria (Oran).

38. Anthophora rufa.

Anthophora rufa, *St. Farg. Hym.* ii. 48. 22 ♀.

Hab. Dalmatia.

39. Anthophora Sicula.

Female. Length 6½ lines.—Black, clothed with pale fulvous pubescence, the legs ferruginous, the scopa of a bright fulvous above, beneath short, sparing and fuscous; the apical joints of the tarsi ferruginous, the calcaria black. Abdomen densely pubescent, the cilia on the margins of the segments being long and dense; abdomen, beneath fusco-ferruginous, the margins of the segments ciliated with pale fulvous hairs. The wings fusco-hyaline.

Male.—The pubescence on the head, thorax and abdomen short, dense and fulvous, that on the cheeks, legs and abdomen beneath black; the scape in front, clypeus and face on each side, also the labrum and a spot at the base of the mandibles white; wings as in the other sex.

Hab. Sicily. (Coll. F. Smith.)

40. Anthophora pruinosa.

Female. Length 6 lines.—Black, the face, thorax above, two

basal segments of the abdomen and the posterior tibiæ above, clothed with a cinereous pubescence, more or less tinged with ochraceous; that on the tibiæ has a silvery effulgence in certain lights; on the vertex, sides of the head, and the entire insect beneath it is black; the legs are dark rufo-piceous; the wings subhyaline, their apical margins faintly clouded; on the apical margin of the second segment is a narrow fringe of white pubescence; the third and apical segments have a thin black pubescence; the abdomen rufo-piceous beneath.

Male.—Clothed more densely than the female, but similarly coloured; the scape in front, the clypeus and labrum yellow, the clypeus has two rounded black maculæ at the base; its anterior margin and two spots on the labrum black; the thorax and cheeks have a cinereous pubescence; the anterior and intermediate femora have a fringe of that colour; the intermediate legs elongate, their tibiæ have a long fringe of white pubescence behind; the basal joint of their tarsi fringed in front with short, and behind with long black pubescence, the second, third and fourth joints pale testaceous.

Hab. Sicily. (Coll. F. Smith.)

41. Anthophora Hispanica. B.M.

Apis hispanica, *Fabr. Ent. Syst.* ii. 318. 17 ♂.
Megilla hispanica, *Fabr. Syst. Piez.* p. 328. 1.
Anthophora hispanica, *St. Farg. Hym.* ii. 55. 29.
Lucas, Explo. Sc. Algér. iii. 146. 11.
Eversm. Bull. Mosc. xxv. 108. 3?

Hab. Spain; Algeria (Oran).

42. Anthophora canifrons.

Female. Length 7 lines.—Black, the clypeus has a narrow, abbreviated, yellow line in the centre, touching the anterior margin; the face has a cinereous pubescence, the tips of the hairs black. Thorax densely clothed with a short obscure dirty yellow pubescence; on the sides and on the metathorax it is nearly white; legs dark rufo-piceous, the pubescence beneath black; above, the pubescence is of a yellow cinereous; the basal joint of the intermediate and posterior tarsi have a black pubescence in front, posteriorly it is pale ochraceous. Abdomen rufo-piceous beneath; above, the apical margins of the segments have a very narrow white marginal fascia, which is continued beneath; the third and fourth fasciæ are fuscous in the middle.

Hab. Canary Islands. (Coll. F. Smith.)

43. Anthophora atro-alba. B.M.

Anthophora atro-alba, *St. Farg. Hym.* ii. 73. 41.
Brullé, Hist. Nat. Il. Canar. iii. 84. 9.

Hab. The Canaries; Albania; Italy.

44. Anthophora pulverosa.

Female. Length 5½ lines.—Black, densely clothed with hoary pubescence, that on the disk of the thorax has an ochraceous tinge, on the abdomen it is very short and also tinged with ochraceous, that on the apex of the abdomen is dark fuscous; on the posterior tibiæ the pubescence is bright and glittering, faintly tinged with yellow, but at the apex of the intermediate tibiæ and on the anterior tarsi it is of a brighter yellow, the apical joints of the tarsi ferruginous; the flagellum beneath, the legs and abdomen beneath rufo-piceous; the wings hyaline, the nervures and tegulæ pale testaceous; on the apical margins of the segments of the abdomen is a fascia of pale pubescence.

Male.—Rather smaller than the female and having a similar dusty appearance, the pubescence being of a little brighter yellow; the scape in front, the clypeus, the face on each side, a line above the clypeus, the labrum and mandibles white, the latter ferruginous at their apex, the legs ferruginous; otherwise as in the female.

Hab. Canary Islands. (Coll. W. W. Saunders, Esq.)

45. Anthophora socia.

Megilla socia, *Klug, Symb. Phys.* dec. v. t. 49. f. 6 ♀.

Hab. Syria.

46. Anthophora robusta.

Megilla robusta, *Klug, Symb. Phys.* dec. v. t. 49. f. 5 ♀.

Hab. Syria.

47. Anthophora concinna.

Megilla concinna, *Klug, Symb.* dec. v. t. 49. f. 11 ♂.

Hab. Syria. (Coll. F. Smith.)

48. Anthophora farinosa.

Megilla farinosa, *Klug, Symb. Phys.* dec. v. t. 50. f. 2 ♀.

Hab. Arabia Felix.

49. Anthophora valga.
Megilla valga, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 15 ♂.
Hab. Arabia.

50. Anthophora vetula.
Megilla vetula, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 3 ♂.
Hab. Arabia.

51. Anthophora scopipes.
Anthophora scopipes, *Spin. Ann. Soc. Ent. Fr.* vii. 545.
Megilla scopipes, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 1 ♂, 2 ♀.
Hab. Egypt.

52. Anthophora caliginosa.
Megilla caliginosa, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 7 ♀.
Hab. Egypt; Syria.

53. Anthophora crocea.
Megilla crocea, *Klug*, *Symb. Phys.* dec. v. t. 50. f. 1 ♀.
Hab. Nubia (New Dongala).

54. Anthophora incana.
Megilla incana, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 12 ♀.
Hab. Egypt.

55. Anthophora alternans.
Megilla alternans, *Klug*, *Symb. Phys.* dec. v. t. 50. f. 3 ♀.
Hab. Egypt.

56. Anthophora lanata.
Megilla lanata, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 4 ♀.
Hab. Alexandria.

57. Anthophora mucorea.
Megilla mucorea, *Klug*, *Symb. Phys.* dec. v. t. 49. f. 13 ♂.
Hab. Egypt; Arabia.

58. Anthophora Nubica. B.M.
Anthophora Nubica, *St. Farg. Hym.* ii. 33. 8 ♂.
Megilla Nubica, *Klug*, *Symb. Phys.* dec. v. no. 7. t. 49. f. 8, 9 ♂ ♀.
Hab. Africa (Nubia).

59. Anthophora cinerascens.

Anthophora cinerascens, *St. Farg. Hym.* ii. 51. 25 ♀.

Hab. Nubia.

60. Anthophora vidua.

Megilla vidua, *Klug, Symb. Phys.* dec. v. t. 49. f. 10 ♀.

Hab. Egypt (Saccahram).

61. Anthophora Savignyi.

Anthophora Saviguyi, *St. Farg. Hym.* ii. 47. 21 ♀.

Hab. Eygpt.

62. Anthophora senescens.

Anthophora senescens, *St. Farg. Hym.* ii. 71. 39.

Hab. Algeria (Oran).

63. Anthophora ventilabris.

Anthophora ventilabris, *St. Farg. Hym.* ii. 72. 40 ♂.

Hab. Algeria (Oran).

64. Anthophora Romandii.

Anthophora Romandii, *St. Farg. Hym.* ii. 87. 54.
Lucas, Explo. Sc. Algér. iii. 155. 26. t. 2. f. 7.

Hab. Algeria (Oran).

65. Anthophora biciliata.

Anthophora biciliata, *St. Farg. Hym.* ii. 83. 50.
Lucas, Explo. Sc. Algér. iii. 154. 25. t. 2. f. 4.

Hab. Algeria (Oran).

66. Anthophora calcarata.

Anthophora calcarata, *St. Farg. Hym.* ii. 42. 16 ♂ ♀.

Hab. Algeria (Oran).

67. Anthophora dispar. B.M.

Anthophora dispar, *St. Farg. Hym.* ii. 56. 30.
Lucas, Explo. Sc. Algér. iii. 146. 12. t. 1. f. 8.

Hab. Algeria (Oran).

68. Anthophora ephippium.

Anthophora ephippium, *St. Farg. Hym.* ii. 67. 37 ♂.
Lucas, Explo. Sc. Algér. iii. 149. 17. t. 1. f. 5.

Hab. Algeria (Oran).

69. Anthophora fulvitarsis. B.M.

Anthophora fulvitarsis, *Brullé, Expéd. Sc. de Morée,* iii. 329. 735.
St. Farg. Hym. ii. 62. 34.

Hab. Morea; Algeria (Oran).

70. Anthophora ferruginea.

Anthophora ferruginea, *St. Farg. Hym.* ii. 78. 45.
Lucas, Explo. Sc. Algér. iii. 153. 23. t. 2. f. 6.

Hab. Algeria (Oran). (Coll. W. W. Saunders, Esq.)

71. Anthophora liturata.

Anthophora liturata, *St. Farg. Hym.* ii. 74. 42.
Lucas, Explo. Sc. Algér. iii. 152. 21. t. 2. f. 2.

Hab. Algeria (Oran).

72. Anthophora Mauritanica.

Anthophora mauritanica, *Lucas, Explo. Sc. Algér.* iii. 205. t. 9. f. 4.

Hab. Algeria.

73. Anthophora nigro-cincta. B.M.

Anthophora nigro-cincta, *St. Farg. Hym.* ii. 76. 44.
Lucas, Explo. Sc. Algér. iii. 153. 22. t. 2. f. 5.

Hab. Algeria (Oran).

74. Anthophora nigro-fulva.

Anthophora nigro-fulva, *St. Farg. Hym.* ii. 88. 55.
Lucas, Explo. Sc. Algér. iii. 155. 27. t. 2. f. 8.

Hab. Algeria (Oran).

75. Anthophora Oraniensis.

Anthophora Oraniensis, *St. Farg. Hym.* ii. 39. 19 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 143. 6. t. 1. f. 1.

Hab. Algeria (Oran).

76. Anthophora nasuta.

Anthophora nasuta, *St. Farg. Hym.* ii. 66. 36.
Lucas, Explo. Sc. Algér. iii. 148. 16. t. 1. f. 9.

Hab. Algeria (Oran).

77. Anthophora nigro-maculata.

Anthophora nigro-maculata, *Lucas, Explo. Sc. Algér.* iii. 146. 10. t. 1. f. 3.

Hab. Algeria; Spain; Portugal.

78. Anthophora pennata. B.M.

Anthophora pennata, *St. Farg. Hym.* ii. 59. 32.
Lucas, Explo. Sc. Algér. iii. 147. 14. t. 1. f. 6.

Hab. Algeria (Oran).

79. Anthophora quadricolor.

Anthophora quadricolor, *Erichs. in Wagner Reis. in der Regents. Algier.* iii. 193. 54. t. 9.
Lucas, Explo. Sc. Algér. iii. 154. 24.

Hab. Africa.

80. Anthophora atrifrons.

Female. Length 6 lines.—Black, the head clothed with black pubescence, on the vertex is a little fulvous pubescence; the thorax and abdomen above clothed with bright fulvous pubescence; on the disk of the thorax between the wings, not reaching the tegulæ, is a rounded patch of black pubescence, there is also a little in the middle of the two basal segments; the entire pubescence of the legs and of the body beneath is black; towards the apex of the abdomen the pubescence is paler than the rest; wings of a smoky hyaline.

Hab. Cape of Good Hope. (Coll. F. Smith.)

81. Anthophora bipartita. B.M.

Female. Length 7½ lines.—Black, the face thinly covered with a short griseous pubescence, mixed with black at the sides and on the vertex; the clypeus has a narrow white line running down the middle, expanding into an angular shape at the margin of the clypeus, immediately beneath is a white spot on the labrum, which is covered with short griseous pubescence, as well as the sides of the head and the cheeks. Thorax densely pubescent above, the anterior portion as far as the tegulæ black; posteriorly

fulvous; the wings dark fuscous, having a purple iridescence; the coxæ and femora fusco-ferruginous, the pubescence of the legs black, the posterior tibiæ and the basal joint of the tarsi have a dense fringe of that colour. Abdomen shining, finely punctured and having a little black pubescence at the sides and apex, beneath obscurely ferruginous towards the base.

Hab. Port Natal.

82. Anthophora vestita. B.M.

Female. Length 6 lines.—Black, the head covered with a dense white pubescence, the labrum covered with the same; the mandibles have their tips and a minute spot at their base yellow. Thorax densely pubescent, that on the disk is a mixture of black and pale ochraceous, on the metathorax it is very pale fulvous, and beneath it is white, the legs ferruginous; the femora beneath, and the posterior tibiæ and basal joint of the tarsi above, clothed with white pubescence, that on the anterior and intermediate legs above is of a yellowish-white, on the tarsi beneath it is fulvo-ferruginous; the calcaria ferruginous; the wings subhyaline, having a fulvous tinge, the nervures black, the tegulæ pale testaceous. Abdomen densely clothed above with a short fulvo-ochraceous pubescence.

Hab. Port Natal.

83. Anthophora plumipes. B.M.

Apis plumipes, *Fabr. Ent. Syst.* ii. 326. 55, and *Cab. Mus. Dom. Banks.*
Centris plumipes, *Fabr. Syst. Piez.* p. 356. 7 ♀.
Anthophora atrocincta, *St. Farg. Hym.* ii. 35. 10 ♂.

Fabricius has given the habitat for this insect India, but this must be an error; it appears to be a common African species.

Hab. Senegal; the Gambia.

84. Anthophora nivea.

Anthophora nivea, *St. Farg. Hym.* ii. 52. 26 ♀.

Hab. Senegal.

85. Anthophora calens. B.M.

Anthophora calens, *St. Farg. Hym.* ii. 49. 23 ♀.

Hab. Senegal.

86. Anthophora basalis. B.M.

Female. Length 7½ lines.—Black, the head densely clothed with a short black pubescence, the apex of the clypeus naked, obliquely truncate and roughly punctured, the labrum pubescent and the mandibles ciliated with black hairs beneath, their tips pale testaceous; the thorax above and the first segment of the abdomen densely clothed with a rich fulvous pubescence; the legs entirely black; the wings fuscous, their nervures black, the tegulæ pale rufo-testaceous. Abdomen, the fifth and apical segment covered with black pubescence, and having a little pale pubescence laterally; beneath, obscurely rufo-piceous, the third, fourth and fifth segments having on each side a pale fringe.

Hab. South Africa. (Coll. Dr. A. Smith.)

87. Anthophora pulchra. B.M.

Female. Length 5 lines.—Black, the clypeus, a triangular shape above, the face on each side, the labrum, a spot on the scape in front, and the mandibles, yellowish-white; an elongate stripe on each side of the clypeus, its anterior margin and two minute dots at the base of the labrum black, the tips of the mandibles ferruginous; the flagellum fulvous beneath; the face has a griseous pubescence, on the vertex it is ochraceous. Thorax, the disk clothed with fulvo-ochraceous pubescence, paler on the sides, and beneath of a bluish-white, in some individuals it has a greenish tinge; the wings subhyaline, the nervures fuscous; the legs rufo-piceous and having a little black pubescence beneath; the tibiæ and the basal joint of the anterior and intermediate tarsi clothed with white pubescence, which has usually more or less of a yellow tinge, sometimes it is tinged with blue or green; the basal joint of the posterior tarsi has usually a patch of pale pubescence at the base, but it is frequently black. Abdomen, the apical margins of the four basal segments have fasciæ of bluish-white pubescence, the fifth segment has a little white pubescence on each side, the sixth is dark rufo-piceous, and has some fuscous pubescence on each side.

Var. *a*. having an oblique quadrate spot on each side of the clypeus, its anterior margin ferruginous, the spots on the labrum obsolete.

Male.—Closely resembles the female, but has only a narrow black line on each side of the clypeus; in other respects as in the other sex.

Hab. Australia (Cape Upstart; Moreton Bay; Hunter River).

88. Anthophora cingulata. B.M.

Andrena cingulata, *Fabr. Ent. Syst.* ii. 314. 30.
Megilla cingulata, *Fabr. Syst. Piez.* p. 332. 18, and *Mus. Dom. Banks.*
Megilla cincta, *Fabr. Syst. Piez.* p. 330. 9, var. ♀, *Mus. Dom. Banks.*
Anthophora cingulata, *St. Farg. Hym.* ii. 46. 20.

Hab. Australia.

89. Anthophora æruginosa. B.M.

Female. Length 5 lines.—Black, the head and thorax densely covered with short green pubescence, varying in the tint in different individuals; the clypeus, labrum, mandibles, and a triangular spot above the clypeus, yellow; the clypeus has on each side at the base a quadrate black spot, which is emarginate at its inferior side; the labrum has two fuscous dots at the base, and the tips of the mandibles are fusco-ferruginous, the flagellum fulvous beneath. Thorax, the wings hyaline, the nervures fuscous, the tegulæ pale testaceous; legs rufo-piceous; beneath, their pubescence is black; the pubescence of the tarsi black, the intermediate and posterior pairs having a little green at their base above; the posterior tibiæ have a line of black pubescence at their base above. Abdomen rufo-piceous beneath; above, the extreme apex covered with black pubescence.

Male.—Closely resembling the other sex, but having the scape yellow in front; the cheeks and anterior femora beneath have a long dense white pubescence; the intermediate tibiæ and tarsi are fringed with long black pubescence in front, and with white behind; the posterior tarsi have a dense black pubescence; otherwise as in the female.

Hab. Australia (Hunter River).

90. Anthophora zonata. B.M.

Apis zonata, *Linn. Syst. Nat.* i. 955. 19.
Andrena zonata, *Fabr. Ent. Syst.* ii. 311. 19.
Megilla zonata, *Fabr. Syst. Piez.* p. 331. 13.
Anthophora zonata, *St. Farg. Hym.* ii. 25. 1.

Hab. India; Ceylon; Philippine Islands; Hong Kong; North China.

91. Anthophora subcærulea.

Anthophora subcærulea, *St. Farg. Hym.* ii. 30. 4 ♂ ♀.

Hab. India (Bengal). (Coll. W. W. Saunders, Esq.)

92. Anthophora niveo-cincta.

Female. Length 5 lines.—Black, a triangular spot above the clypeus, the clypeus, the face on each side, the labrum and mandibles, and a spot on the scape in front, yellow; the clypeus has on each side at the base an elongate quadrate spot, and its anterior margin narrowly, black; the labrum has a fuscous spot on each side at the base, the apex of the mandibles and the flagellum ferruginous; the pubescence on the face and cheeks white, on the vertex and disk of the thorax it is pale fulvous, the tips of the hairs being black; the pubescence on the sides of the thorax, beneath, and also on the metathorax, white; the legs ferruginous, above densely covered with white pubescence; beneath it is black. Abdomen, the margins of the segments have a fascia of white pubescence, the fifth is covered with the same, the apex fuscous; beneath, the abdomen is ferruginous.

Hab. India. (Coll. J. S. Baly, Esq.)

93. Anthophora fasciata.

Megilla fasciata, *Fabr. Syst. Piez.* p. 331. 12.

Hab. India.

94. Anthophora confusa.

Female. Length 6 lines.—Black, a minute triangular spot above the clypeus, a line down its centre, a transverse line on each side of it on the face at the anterior margin, and the labrum yellowish-white; the labrum has a narrow transverse line at the base, a rounded spot on each side at the base, and its anterior margin narrowly, black; the mandibles yellow, their apical half ferruginous; the face has a short cinereous pubescence, intermixed with long black hairs, on the cheeks it is white; the thorax has a dense obscure fulvous pubescence above, the tips of the hairs black; the wings fusco-hyaline; the pubescence on the thorax beneath, and the fringe on the femora white; legs fusco-ferruginous; the pubescence on the anterior pair above pale; on the intermediate ones fuscous, and having a white fringe behind; the posterior pair have black pubescence within and beneath, and white above; having an abbreviated black stripe at the base of the tibiæ. Abdomen, the four basal segments have a narrow band of short white pubescence on their apical margins, the fifth is fringed on each side with white.

Hab. India. (Coll. J. S. Baly, Esq.)

95. Anthophora bicincta. B.M.

Apis bicincta, *Fabr. Ent. Syst.* ii. 338. 101.
Centris bicincta, *Fabr. Syst. Piez.* p. 358. 16.
Anthophora bicincta, *St. Farg. Hym.* ii. 34. 9.

Hab. India.

96. Anthophora violacea. B.M.

Anthophora violacea, *St. Farg. Hym.* ii. 80. 47.

Hab. India.

97. Anthophora villosula. B.M.

Male. Length 6 lines.—Black, densely covered with hoary pubescence, the tips of the hairs on the vertex and thorax fuscous; the scape in front, the clypeus, labrum and mandibles yellow; on each side at the base of the clypeus a large rounded black spot, a similar fuscous spot on each side at the base of the labrum, the apical half of the mandibles ferruginous. Thorax, the wings subhyaline, the tegulæ and nervures rufo-piceous; the intermediate legs elongate, the basal joint of the tarsi clavate, having towards the apex in front a little fuscous pubescence intermixed with a few long pale hairs, behind ciliated with very long pale fuscous hairs; the apical or claw-joint has on each side a similar pubescence, that in front and behind on the intermediate and posterior tibiæ is yellowish; the tarsi have beneath a short dense dark brown pubescence; the apical joints of the tarsi ferruginous; the apical margins of the segments testaceous.

Hab. North China (Shanghai).

98. Anthophora abrupta.

Anthophora abrupta, *Say, Bost. Journ. Nat. Hist.* i. 409. 1 ♂.

Hab. North America (Indiana).

99. Anthophora bomboides.

Anthophora bomboides, *Kirby, Faun. Boreal. Amer.* 271. 1.

Hab. North America.

100. Anthophora fuscipennis.

Female. Length $4\frac{1}{2}$ lines.—Black, the pubescence black, on the head it is sparing, the clypeus strongly punctured. Thorax moderately punctured, the wings fuscous, the apical joints of the tarsi ferruginous, their pubescence beneath ferruginous.

Abdomen shining, finely punctured, the base more strongly so, pubescent; on the apical margin of the fourth segment on each side is a patch of white pubescence.

Hab. North America. (Coll. F. Smith.)

101. Anthophora sponsa. B.M.

Female. Length 6½ lines.—Black, the pubescence of the head black, the clypeus covered with large deep punctures, subcarinate in the centre; the labrum rugose. Thorax clothed above and on the sides with ochraceous pubescence; the wings subhyaline; the nervures black, the second submarginal cell narrowed towards the marginal and receiving the first recurrent nervure in the middle; the legs fusco-ferruginous, their pubescence entirely black; the basal segment of the abdomen covered with ochraceous pubescence, the following segments with black; beneath obscurely fusco-ferruginous; the apical half of the segments strongly punctured.

This species may very possibly prove to be the other sex of Say's *A. abrupta*.

Hab. United States.

102. Anthophora frontata.

Anthophora frontata, *Say*, *Bost. Journ. Nat. Hist.* i. 409. 2 ♂.

Hab. North America (Louisiana).

103. Anthophora taurea. B.M.

Anthophora taurea, *Say*, *Bost. Journ. Nat. Hist.* i. 410. 3 ♂ ♀.

Hab. North America (Indiana).

104. Anthophora marginata. B.M.

Female. Length 5½ lines.—Black, the head and thorax covered with grey pubescence, the anterior margin of the clypeus and the labrum coarsely rugose; the wings subhyaline; the thorax beneath and the femora have a long cinereous pubescence; the tibiæ and tarsi above have a pale ochraceous or dirty-white pubescence, the tarsi beneath have dark ferruginous pubescence, the apical joints ferruginous. Abdomen, a little cinereous pubescence at the base, the apical margins of the segments yellowish-white, naked.

Hab. Mexico.

105. Anthophora Floridana. B.M.

Female. Length 6 lines.—Black, the pubescence on the head

entirely black, the clypeus strongly punctured; the thorax above, and the basal segment of the abdomen above, densely clothed with short ochraceous pubescence; the wings subhyaline; the second submarginal cell receiving the first recurrent nervure near its apex; the pubescence of the legs black; the abdomen smooth and shining, having a little black pubescence at the sides of the apical segments.

Male.—Like the female, with the following exceptions: the clypeus, the face on each side, and a narrow line above the clypeus yellow; the posterior legs more slender and elongate; the claw-joints ferruginous.

Hab. East Florida (St. John's Bluff.)

106. Anthophora melaleuca.

Anthophora melaleuca, *St. Farg. Hym.* ii. 32. 7 ♂.

Hab. Paraguay.

107. Anthophora apicalis.

Anthophora apicalis, *Guér. Icon. Règ. Anim. Ins.* p. 455. t. 74. f. 4.

Hab. Cuba.

108. Anthophora Domingensis.

Anthophora Domingensis, *St. Farg. Hym.* ii. 32. 6 ♂.

Hab. St. Domingo.

109. Anthophora dimidiata.

Male. Length 6 lines.—Head, thorax and legs black, the clypeus and labrum yellowish-white, immaculate, the labrum having a few scattered black hairs; the flagellum nigro-piceous beneath; the pubescence on the thorax very dense, short, and of a sooty-black, that on the legs is of the same colour, the scopa on the posterior legs long and dense; the wings hyaline, the nervures ferruginous. Abdomen violet and having a short scattered black pubescence.

Hab. Chili. (Coll. F. Smith.)

110. Anthophora Chiliensis.

Anthophora chiliensis, *Spin. Faun. Chili.* vi. 172. 2.

Male and female. Length 5 lines.—The pubescence cinereous; the tarsi of the female testaceous, the pubescence of the head, thorax, the first segment of the abdomen, the legs and venter

cinereous ; the pubescence is black, but sparing, at the base of the second abdominal segment; all the segments have fasciæ of white pubescence.

Hab. Chili.

111. ANTHOPHORA TRISTRIGATA.

Anthophora tristrigata, *Spin. Faun. Chili.* vi. 171. 1.

Female. Length 5 lines.—Black ; the pubescence on the face and thorax above white ; the clypeus and legs above black ; the abdomen has three white pilose fasciæ.

Hab. Chili.

112. ANTHOPHORA INCERTA.

Anthophora incerta, *Spin. Faun. Chili.* vi. 172. 3.

Female. Length 6 lines.—The antennæ, abdomen and legs black ; the pubescence of the head and thorax in front pale fulvous.

Hab. Chili.

113. ANTHOPHORA GAYI.

Anthophora Gayi, *Spin. Faun. Chili.* vi. 173. 4.

Male. Length 4 lines.—Black ; the pubescence cinereous ; antennæ luteous, the scape black ; the clypeus, labrum and anterior sides of the face white ; the posterior femora swollen ; the first joint of the posterior tarsi dilated, the apex bispinose.

Hab. Chili.

114. ANTHOPHORA DISTINGUENDA.

Anthophora distinguenda, *Spin. Faun. Chili.* vi. 173. 5.

Male. Length 4 lines.—The clypeus and antennæ in front yellow ; the posterior femora swollen, but the tarsi simple ; otherwise very like *A. Gayi.*

Hab. Chili.

115. ANTHOPHORA FULVIFRONS. B.M.

Female. Length 4½ lines.—Black, the face and the labrum clothed with fulvous pubescence ; the cheeks have a cinereous pubescence ; the antennæ and legs ferruginous ; the thorax above has a short cinereous pubescence, on the middle of the disk it is sooty-black, and a line of similar pubescence passes off on each side to the humeral angles ; the scutellum is also covered with

blackish pubescence; the wings fusco-hyaline, their nervures black; the tegulæ rufo-piceous, the pubescence of the legs black. Abdomen smooth and shining, at the base a little cinereous pubescence, the apical margins of the second, third and fourth segments have a narrow fascia of white pubescence, the apex fuscous.

Hab. Brazil (Para; Santarem).

116. Anthophora albifrons. B.M.

Female. Length 5½ lines.—Black, the head densely clothed with long hoary pubescence; the mandibles ferruginous at their base and apex, pale yellow in the middle. Thorax densely clothed above with short ferruginous pubescence; the wings subhyaline, their nervures black; on the thorax beneath, coxæ and femora is a long white pubescence; legs fusco-ferruginous, clothed above with a pale glittering pubescence. Abdomen, the basal segment clothed above with ferruginous pubescence, the margins of the three following segments have a fascia of yellowish-white pubescence, between the fasciæ the pubescence is black.

Hab. South America.

117. Anthophora tecta.

Female. Length 6½ lines.—Head and thorax black, the clypeus having a broad T-shaped white mark on the clypeus, its anterior margin ferruginous, the labrum yellowish-white, the margin broadly ferruginous, the mandibles ferruginous; the sides of the face covered with dense short white pubescence, the sides of the head and the cheeks densely covered with long white pubescence, on the vertex it is fulvous. Thorax clothed above with fulvous pubescence, on the middle it is fuscous, on the sides the fulvous colouring graduates into white, the femora fringed with yellowish-white pubescence; the legs rufo-testaceous, the legs above have a cinereous pubescence, the posterior tibiæ and the basal joint of the tarsi densely clothed above with white pubescence, the calcaria black. Abdomen fusco-æneous, the basal segment clothed with fulvous pubescence, on the second and third segments the pubescence is very sparing and black, the fourth and fifth densely clothed with very short griseous pubescence, the pubescence at the apex of the latter segment fuscous; the margins of the segments pale rufo-testaceous; beneath rufo-testaceous, the margins of the segments thinly fringed with long pale pubescence, the fifth ciliated with short fulvous pubescence.

Hab. Brazil? (Coll. F. Smith.)

118. Anthophora tricolor. B.M.

Andrena tricolor, *Fabr. Ent. Syst.* ii. 310. 13 ♂.
Megilla tricolor, *Fabr. Syst. Piez.* p. 329. 7.
Anthophora tricolor, *St. Farg. Hym.* ii. 86. 53.

Hab. South America.

Female. This sex closely resembles the male, but has the head entirely black; the head has a griseous pubescence, the posterior tibiæ have exteriorly a white pubescence, the abdomen as in the male.

119. Anthophora rufipes.

Anthophora rufipes, *St. Farg. Hym.* ii. 50. 24 ♀.

Hab. ——?

120. Anthophora maculicornis.

Anthophora maculicornis, *St. Farg. Hym.* ii. 31. 5 ♂.

Hab. ——?

121. Anthophora acarensis. B.M.

Apis acarensis, *Fabr. Ent. Syst.* ii. 329. 68.
Centris acarensis, *Fabr. Syst. Piez.* p. 356. 9.

Hab. Guinea; South Africa (the Gambia).

Genus 52. DIPHAGLOSSA.

Diphaglossa, *Spin. Faun. Chili.* vi. 168.

Ocelli placed in a triangle on the vertex; the labial palpi 4-jointed, about the same length as the labium; the two basal joints stout, subclavate, the basal joint as long as the second and third, the three apical joints gradually decreasing in length, the two apical joints slender, inserted at the apex of the second joint; the labium obtuse and broad at the apex, which is emarginate; near the apex on each side is a notch; the angles of the apex rounded and having each a long slender filament, acute at its apex, a shorter filament is also produced in the notch on each side. Maxillary palpi 6-jointed, the joints slender and subclavate. The superior wings have one marginal and three submarginal cells.

1. Diphaglossa Gayi.

Diphaglossa Gayi, *Spin. Faun. Chili.* vi. 170. 1. t. 1. f. 1.

Male. Length 7 lines.—The pubescence fulvous; antenna mandibles and thorax black; abdomen and legs rufous.

Hab. Chili.

Genus 53. XYLOCOPA.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Andrena, pt., *Latr. Hist. Nat. Ins.* iii. (1802).
Xylocopa, *Latr. Hist. Nat. Ins.* iii. (1802).
Mesotrichia, *Westw. Trans. Ent. Soc.* ii. 112 (1836).
Platynopoda, *Westw. Nat. Libr.* (1840).
Audinetia, *St. Farg. Hym.* ii. 203 (1841).
Schönnherria, *St. Farg. Hym.* ii. 207 (1841).

1. Xylocopa violacea. B.M

Apis violacea, *Scop. Ent. Carn.* p. 305. 812. fig. 812.
Linn. Syst. Nat. i. 959. 38.
Fabr. Syst. Ent. p. 379. 2; *Ent. Syst.* ii. 315. 3.
Schäff. Icon. Ins. Ratisb. t. 102. f. 7, 8.
Schrank, Ins. Aust. p. 394. 795.
Rossi, Faun. Etrusc. ii. 99.
Christ. Hym. p. 119. t. 4. f. 5.
Panz. Faun. Germ. 59. 6.
Xylocopa violacea, *Fabr. Syst. Piez.* p. 338. 3.
Latr. Règ. Anim. v. 346.
St. Farg. & Serv. Ency. Méth. x. 794. 2.
Lucas, Hist. Nat. des Ins. iii. 410.
St. Farg. Hym. ii. 183. 13 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 166. 51.
Eversm. Bull. Mosc. xxv. 125. 1.
Xylocopa femorata, *Fabr. Syst. Piez.* p. 339. 4 ♂.
Reaum. Ins. vi. t. 5. f. 1, 2.

Hab. Europe; Algeria.

2. Xylocopa cyanescens. B.M.

Xylocopa cyanescens, *Brullé, Expéd. Sc. de Morée*, iii. 339. 754. t. 48. f. 8.
Lucas, Explo. Sc. Algér. iii. 166. 52.
Xylocopa minuta, *St. Farg. Hym.* ii. 190. 30.
Xylocopa taurica, *Erichs. Reis. in der Regents. Algier, von M. Wagner*, iii. 192. 52.

Hab. France (Montpellier); Morea; Algeria.

3. Xylocopa fuscata.

Female. Length 8 lines.—Fuscous, the antennæ ferruginous, slightly fuscous towards their apex above; the face on each side of the clypeus, which is strongly punctured, has a pale fulvous pubescence; the thorax and legs have a fulvous pubescence, palest on the former beneath, and very bright on the posterior tibiæ and tarsi; the legs ferruginous; wings subhyaline, the nervures and tegulæ rufo-testaceous. Abdomen ovate, the apical margins of the second and three following segments fringed with pale pubescence, interrupted in the middle; the apex bright fulvous; beneath rufo-testaceous, the apical segments fringed with ferruginous pubescence.

Hab. Albania (Yanina). (Coll. W. W. Saunders, Esq.)

4. Xylocopa lanata. B.M.

Male. Length 6 lines.—Head and thorax black; the clypeus, a triangular shape above it, and the labrum, white; the antennæ ferruginous, the mandibles rufo-testaceous; the head and thorax have a dense white woolly pubescence, that on the disk of the latter has a yellow hue; the wings hyaline, having a pale fulvous stain, the nervures pale rufo-testaceous, the tegulæ white, having a ferruginous stain in front; the legs pale rufo-testaceous, having a pale golden fulvous pubescence. Abdomen dark testaceous, having on the basal segment a pale yellow pubescence, the apical segments clothed with bright fulvous; the apical margins rufo-testaceous, and having laterally a narrow white marginal fringe; beneath ferruginous.

Hab. Turkey.

5. Xylocopa cantabrita. B.M.

Xylocopa cantabrita, *St. Farg. Hym.* ii. 193. 35.

Hab. Spain.

6. Xylocopa sinuatifrons.

Xylocopa sinuatifrons, *Spin. Ann. Soc. Ent. Fr.* i. ser. 2. 143. (1843).

Hab. Spain.

7. Xylocopa hellenica.

Xylocopa hellenica, *Spin. Ann. Soc. Ent. Fr.* ser. 2. i. 144 (1843).

Hab. Spain.

8. Xylocopa lateritia.

Female. Length 9 lines.—Black, the face having a raised tubercle in front of the anterior stemma, between the antennæ; the margins of the clypeus slightly raised; the antennæ dark rufo-testaceous, the flagellum beneath palest; the thorax above and the first segment of the abdomen densely clothed with a short brick-red pubescence; wings very dark brown, having a violet iridescence; the legs entirely black; the abdomen very finely and closely punctured, towards the apex fringed at the sides with short black pubescence.

Hab. Isle of Johanna (Mozambique). (Coll. W. W. Saunders, Esq.)

9. Xylocopa Caribea.

Xylocopa caribea, *St. Farg. Hym.* ii. 202. 49.

Hab. Isle of Guadaloupe.

10. Xylocopa Caffra. B.M.

Apis caffra, *Linn. Syst. Nat.* i. 959. 39.
Fabr. Ent. Syst. ii. 319. 19.
Bombus caffrus, *Fabr. Syst. Piez.* p. 346. 17.
Xylocopa cafra, *St. Farg. Hym.* ii. 197. 41.

Hab. Africa.

11. Xylocopa crassa. B.M.

Xylocopa crassa, *St. Farg. Hym.* ii. 204. 52.

Hab. Africa.

This is probably the female of *torrida*, both having been sent together from Fernando Po on more than one occasion, with a note to this effect.

12. Xylocopa Africana. B.M.

Apis africana, *Fabr. Ent. Syst.* ii. 319. 20.
Bombus africanus, *Fabr. Syst. Piez.* p. 346. 18.
Xylocopa africana, *St. Farg. Hym.* ii. 198. 43.

Hab. Africa.

13. Xylocopa rufitarsis. B.M.

Xylocopa rufitarsis, *St. Farg. Hym.* ii. 191. 32.

Hab. Africa (Cape).

14. Xylocopa præusta.

Female. Length 10 lines.—Black, the head and thorax densely clothed with short golden-yellow pubescence, the scape in front and the clypeus yellow, the flagellum pale testaceous beneath. Thorax: the legs rufo-testaceous, the anterior coxæ and trochanters terminating in a sharp spine, the anterior tibiæ having a long dense fringe, pale above and black beneath, the tarsi having on both sides a long pale fringe; the intermediate tibiæ and tarsi have a long pale pubescence, that on the tarsi brightest, the posterior pairs have a similar pubescence; the tarsi beneath bright fulvous; wings fusco-hyaline. Abdomen: the base above has a pale golden-yellow pubescence, graduating to bright fulvous at the apex.

Hab. Africa. (Coll. F. Smith.)

15. Xylocopa obscurata.

Male. Length 9 lines.—Black, the head, thorax and basal segment of the abdomen densely clothed with short obscure fulvous pubescence; the scape in front yellow; the flagellum, except the two basal joints, pale testaceous beneath. Thorax: the wings fusco-hyaline, and having a faint purple iridescence; the legs beneath fusco-ferruginous, the anterior legs brightest; the legs have a pale fulvous pubescence, that on the tarsi beneath ferruginous, the posterior pair black above; the apical joints of the tarsi ferruginous, the claws black. Abdomen minutely and very closely punctured, rendering the surface opake; the pubescence short and black, that on the apical segment bright golden-yellow; beneath rufo-testaceous.

Hab. Africa. (Coll. F. Smith.)

16. Xylocopa grisescens. B.M.

Male. Length 9 lines.—Black, the pubescence on the face, thorax above, and legs, of a yellowish-grey, that on the tarsi and apex of the posterior tibiæ bright pale fulvous, on the four apical segments of the abdomen it is black and sparing, at the extreme lateral margins the pubescence is pale; the wings fusco-hyaline, their apical margins clouded, the nervures dark ferruginous; the metathorax rounded behind.

Hab. Algeria.

17. Xylocopa Cirtana.

Xylocopa cirtana, *Lucas, Explo. Sc. Algér.* iii. 167. 54. t. 4. f. 10.

Hab. Algeria (Constantine).

18. Xylocopa Amedæi.

Xylocopa Amedæi, *St. Farg. Hym.* ii. 188. 23. ♀
Lucas, Explo. Sc. Algér. iii. 167. 53. t. 4. f. 9.

Hab. North Africa (Tlemcen); Algeria (Oran; Constantine).

19. Xylocopa Capensis. B.M.

Xylocopa Capensis, *St. Farg. Hym.* ii. 179. 8.

Hab. Cape of Good Hope.

20. Xylocopa albifrons.

Xylocopa albifrons, *St. Farg. Hym.* ii. 191. 31. ♂

Hab. Cape of Good Hope. (Coll. F. Smith.)

21. Xylocopa capitata. B.M.

Female. Length 13 lines.—Black, the head nearly as wide as the thorax; the face clothed with short black pubescence, and having a short tubercle between the antennæ; the flagellum beneath rufo-piceous. Thorax: the disk smooth and shining, having a few scattered fine punctures; the sides of the disk have a short black pubescence, the metathorax rounded; wings very dark fuscous, having a rich purple iridescence; legs entirely black. Abdomen very smooth and shining, and having a few scattered fine punctures, the sides fringed with black pubescence.

Hab. Cape of Good Hope.

22. Xylocopa amethystina. B.M.

Apis amethystina, *Fabr. Ent. Syst.* ii. 325. 51.
Andrena amethystina, *Latr. Ins.* iii. 375.
Xylocopa amethystina, *Fabr. Syst. Piez.* p. 341. 16.
St. Farg. Hym. ii. 182. 12.

Hab. India; Cape of Good Hope?

23. Xylocopa tarsata.

Female. Length 7 lines.—Black, the head very closely punctured, having an elevated short carina between the antennæ; the thorax shining, closely punctured, except in the middle of the disk; the metathorax rounded behind; wings very dark violet; the posterior tarsi and apex of the tibiæ densely clothed with bright fulvous pubescence. Abdomen closely punctured, shining, the apex fringed with black hairs.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

24. Xylocopa olivacea. B.M.

Apis olivacea, *Fabr. Ent. Syst.* ii. 319. 21 ♂.
Bombus olivaceus, *Fabr. Syst. Piez.* p. 347. 20.
Xylocopa luteola, *St. Farg. Hym.* ii. 198. 42 ♂.

Female. Length 7–8 lines.—Black, the face having a little short black pubescence, the thorax and basal segment of the abdomen densely clothed with short bright yellow pubescence; the wings subhyaline towards their base, their apical margins broadly dark fuscous; the legs entirely black.

Hab. Sierra Leone.

25. Xylocopa apicalis. B.M.

Xylocopa apicalis, *White, MSS.*

Female. Length 10 lines.—Black, the face densely clothed with black pubescence; the thorax above and also the basal segment of the abdomen clothed with bright yellow pubescence; the wings dark fuscous, and having a violet tinge towards the base, the margins faintly brassy; the legs and abdomen have a black pubescence, the latter shining and thickly fringed at the sides, sparingly pubescent above, the margins of the segments narrowly rufo-testaceous.

Hab. Sierra Leone; the Gambia.

26. Xylocopa Hottentotta. B.M.

Female. Length 8 lines.—Black, the face very closely and strongly punctured; an elevated sharp carina runs from the base of the clypeus up to the anterior stemma; the flagellum, except the two basal segments, fulvous beneath; the disk of the thorax shining, the punctures scattered, the metathorax rounded behind; wings dark fuscous, having a purple iridescence.

Hab. Sierra Leone; Port Natal.

27. Xylocopa albiceps. B.M.

Xylocopa albiceps, *Fabr. Syst. Piez.* p. 341. 13.
St. Farg. Hym. ii. 189. 27.

Hab. Africa; Sierra Leone; Guinea.

28. Xylocopa torrida. B.M.

Mesotrichia torrida, *Westw. Trans. Ent. Soc. Lond.* ii. 113. 1 ♂ ♀.

Hab. Tropical Africa; Fernando Po.

29. Xylocopa flavo-rufa. B.M.

Apis flavo-rufa, *De Geer, Mém.* vii. 605. t. 45. f. 1.
Oliv. Ency. Méth. iv. 63. 3.
Xylocopa trepida, *Fabr. Syst. Piez.* p. 340. 10.
Hab. South Africa (Port Natal).

30. Xylocopa calens. B.M.

Xylocopa calens, *St. Farg. Hym.* ii. 196. 40 ♀.
Hab. Africa (Port Natal; Abyssinia); Madagascar.

31. Xylocopa conjuncta. B.M.

Male. Length 1 inch 3 lines.—Rufo-testaceous, the scape of the antennæ, as well as the flagellum in front, a spot on each side of the vertex touching the eyes, the margins of the clypeus, and a line down the centre, a transverse line above, a line across at the base of the labrum, and a spot at the base of the mandibles, yellow; the entire insect has a short ochraceous pubescence; in parts, the pubescence has a fulvous tinge, as that on the legs and at the apex of the abdomen; the breast, the femora, tibiæ, coxæ and trochanters nigro-piceous; wings fulvo-hyaline, the nervures ferruginous; the abdomen beneath has on each segment a broad yellow stripe.

Hab. South Africa.

32. Xylocopa combusta. B.M.

Female. Length 13 lines.—Black, the clypeus having the margins a little raised, smooth and shining, also a central smooth line, forming a trident; from the base of the clypeus a smooth raised line passes upwards and encloses the anterior stemma; the face densely clothed with short black pubescence. Thorax: the posterior margin of the scutellum slightly raised and acute; wings deep fuscous, having a brilliant metallic green iridescence; the legs black. Abdomen elongate, shining, and sparingly punctured in the middle, closely so at the sides, towards the apex fringed with black pubescence, at the extreme apex a little bright ferruginous pubescence.

Male. Length 12 lines.—Very closely resembling the female; the scape in front, the clypeus and a triangular shape above it, a minute spot on each side beneath the anterior stemma, another on each side of the labrum, and a small one at the base of the mandibles, yellow; sometimes a minute yellow spot on the second joint of the flagellum in front; the tarsi beneath have a bright ferruginous pubescence; the intermediate legs have the

femora compressed beneath, and expanded, forming a flattened angular shape, the tarsi a little dilated, densely ciliated on both sides with long fulvous pubescence; the posterior tibiæ bent inwards, the tarsi covered exteriorly with long black pubescence: otherwise as in the other sex.

Hab. Congo.

33. Xylocopa ustulata.

Female. Length 7½ lines.—Black, the face densely covered with griseous pubescence, the mandibles and antennæ ferruginous, the flagellum obscure above; the disk of the thorax very glossy and sparingly punctured; in front, clothed with griseous pubescence; the wings dark fuscous, having a violet iridescence, subhyaline at their extreme base; the anterior legs ferruginous beneath, the intermediate and posterior pairs obscurely ferruginous, and clothed above with black pubescence. Abdomen shining, very closely punctured at the sides, sparingly so in the middle, naked; the apex fringed with black pubescence.

Male.—Exactly corresponds with the other sex, but has a little white pubescence on the sides of the thorax beneath the wings, and also a little at the base of the abdomen.

Hab. The Gambia. (Coll. F. Smith.)

34. Xylocopa varipes. B.M.

Female. Length 9 lines.—Black, the pubescence on the head, thorax, basal segment of the abdomen above, ochraceous; that on the thorax inclining to fulvous; the lateral margins of the clypeus slightly raised, and having also a central raised carina; the wings dark fuscous, and having a purple iridescence; the anterior tibiæ and tarsi, the intermediate tibiæ above, as well as the posterior pair, clothed with fulvo-ochraceous pubescence; the intermediate tarsi have a bright ferruginous pubescence with a tuft of ochraceous at their base above, the posterior tarsi have a dark fuscous pubescence with a little bright ferruginous at the apex, the tibiæ have also a little bright ferruginous at their apex above. Abdomen, the second, third and fourth segments fringed at the sides with black pubescence, the fifth and sixth are fringed with fulvo-ochraceous pubescence, the apex with bright ferruginous.

Hab. South Africa (Fernando Po); Sierra Leone.

35. Xylocopa imitator. B.M.

Female. Length 9 lines.—Black, the face has a griseous pubescence, that on the cheeks snow-white; the flagellum except the three basal joints testaceous beneath. Thorax, smooth and

shining on the disk, the sides of which are densely clothed with short black pubescence; wings very dark fuscous, having a bright purple iridescence; the legs have a black pubescence. Abdomen shining, finely and closely punctured at the sides, the punctures more distant in the middle; the extreme apex has a little bright ferruginous pubescence.

Hab. Sierra Leone.

This species very closely approaches the *X. albiceps*, but it is one-third larger, the wings are of a uniform deep purple, not lighter towards the base, as in *X. albiceps*, nor is the abdomen so closely punctured.

36. Xylocopa modesta.

Female. Length 6½ lines.—Black, the face densely covered with short black pubescence, the vertex fringed with black; the thorax and basal segment of the abdomen above densely clothed with short bright yellow pubescence; the wings dark fuscous at their apical margins, towards the base subhyaline, and having a faint purple iridescence; the legs black.

Male closely resembling the female, but having the face covered with cinereous pubescence, and the legs beneath rufo-piceous; the wings as in the female.

Hab. The Gambia. (Coll. F. Smith.)

37. Xylocopa lunata.

Xylocopa lunata, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), t. 7. fig. 2.

Hab. Tranquebar.

38. Xylocopa Indica.

Xylocopa Indica, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), t. 7. f. 2.

Hab. Tranquebar. (Coll. W. W. Saunders, Esq.)

39. Xylocopa verticalis. B.M.

Xylocopa verticalis, *St. Farg. Hym.* ii. 195. 38.

Hab. India.

40. Xylocopa viridipennis. B.M.

Xylocopa viridipennis, *St. Farg. Hym.* ii. 205. 54.

Hab. India; Philippine Islands.

41. Xylocopa tenuiscapa. B.M.

Platynopoda tenuiscapa, *Westw. Nat. Libr.* xxxviii. 271. t. 23. f. 2.
(Audinetia) latipes, *St. Farg. Hym.* ii. 203. 51 ♂ ♀.

Hab. India (Madras); N. India (Silhet); Ceylon.

42. Xylocopa ruficornis.

Xylocopa ruficornis, *Fabr. Syst. Piez.* p. 341. 12.

Hab. India.

43. Xylocopa latipes. B.M.

Apis latipes, *Drurp, Ill. Exot. Ins.* ii. 98. t. 48. f. 2 ♂.
Fabr. Ent. Syst. ii. 314. 1.
Xylocopa latipes, *Fabr. Syst. Piez.* p. 337. 1.
Xylocopa (Audinetia) Latreillii, *St. Farg. Hym.* ii. 206. 55.
Platynopoda latipes, *Westw. Nat. Libr.* xxxviii. 271. t. 23. f. 1.
Apis gigas?, *De Geer*, t. 3. p. 28. f. 15 ♀.
Christ. Hym. t. 4. f. 1, 2 ♀, 3 ♂.

Hab. India; Ceylon; Philippine Islands; China.

44. Xylocopa iridipennis. B.M.

Xylocopa iridipennis, *St. Farg. Hym.* ii. 188. 23.

Hab. India.

45. Xylocopa ferruginea.

Xylocopa ferruginea, *St. Farg. Hym.* ii. 187. 22.

Hab. India; Bengal.

46. Xylocopa fenestrata. B.M.

Apis fenestrata, *Fabr. Ent. Syst. Supp.* p. 273. 3–4.
Xylocopa fenestrata, *Fabr. Syst. Piez.* p. 339. 6.
St. Farg. Hym. ii. 184. 15.

Hab. India (Bengal).

47. Xylocopa collaris. B.M.

Xylocopa collaris, *St. Farg. Hym.* ii. 189. 26.

Hab. India; Sumatra; Bengal.

48. Xylocopa æstuans. B.M.

Apis æstuans, *Linn. Syst. Nat.* i. 961. 53 ♂.
Fabr. Ent. Syst. ii. 323. 41.

Apis leucothorax, *De Geer, Mem.* iii. 573. 4. t. 28. f. 7.
Bombus æstuans, *Fabr. Syst. Piez.* p. 351. 44.
Xylocopa æstuans, *St. Farg. Hym.* ii. 193. 36.
Xylocopa pubescens, *Spin.* (*Klug, MSS.*) *Ann. Soc. Ent. Fr.* vii. 518. 64, and var. *a, b, c, d* (1838).

Hab. India.

49. Xylocopa Olivieri. B.M.

Xylocopa Olivieri, *St. Farg. Hym.* ii. 192. 34.

Hab. India; Bagdad.

50. Xylocopa orichalcea.

Xylocopa orichalcea, *St. Farg. Hym.* ii. 181. 10.

Hab. Bengal; China.

51. Xylocopa nigro-cincta.

Female. Length 10 lines.—Head and thorax black; an elevated carina between the antennæ, the margin raised round the base of the clypeus, not continued to its anterior margin; the labrum has three elevated tubercles. Thorax: the disk smooth, shining, and very delicately punctured, the sides having a dense, short, black pubescence; the wings dark fusco-ferruginous, having a splendid violet iridescence, the legs have a dense black pubescence. Abdomen ferruginous, the apical margins of the segments have a black fascia, the fifth segment obscure, the sixth black, the sides of the abdomen ciliated with a dense black pubescence; the entire abdomen closely punctured; beneath is an elevated sharp longitudinal carina down the centre.

Hab. South America. (Coll. J. S. Baly, Esq.)

52. Xylocopa flavo-nigrescens. B.M.

Male. Length 11 lines.—Black, the pubescence is short and dense, on head and thorax fulvo-ochraceous, at the margin of the basal segment of the abdomen it is bright yellow, gradually becoming more obscure towards the apex, where it is deep black, the apex and sides being fringed with long pubescence of that colour; the basal margin of the second and three following segments have a narrow line of bright yellow pubescence, subinterrupted in the middle, and not reaching the sides. The scape of the antennæ in front, and the flagellum, except the two basal joints, pale testaceous beneath; the wings fuscous, with a purple iridescence; the legs have a black pubescence; the anterior and intermediate tarsi have a long fringe of black pubescence in front.

and of pale yellow behind; the posterior femora incrassate, very broad at their base, which is produced and rounded posteriorly; beneath, the segments of the abdomen are fringed with long yellow pubescence.

Hab. Silhet.

53. Xylocopa acutipennis. B.M.

Male. Length 10 lines.—Black, head much narrower than the thorax; eyes very large; the scape in front, the clypeus, a triangular shape above it, the labrum, and a minute spot at the base of the mandibles, yellow; the vertex covered with a brownish black pubescence, the disk of the thorax smooth and shining in the middle, the sides densely clothed with a short black pubescence, the mesothorax in front obscurely yellow; beneath, the thorax and cheeks are covered with pale yellow pubescence, having in parts a ferruginous stain; the legs beneath are of a dark rufo-testaceous colour; the femora compressed beneath, the posterior pair being broadly grooved longitudinally, and produced at the basal extremity into two sharp angular projections; the posterior tibiæ deeply notched beneath, and produced at their apex into a broad flattened tooth or spine; the anterior tarsi densely clothed with bright golden-yellow pubescence, the intermediate pair with ferruginous, and the posterior pair with black above, and with obscure ferruginous beneath. Abdomen: the basal segment covered with black pubescence, and the apex densely fringed with long blackish-brown pubescence; the apex rufo-piceous.

Hab. Silhet.

54. Xylocopa basalis. B.M.

Female. Length 6½–8 lines.—Black, the face densely covered with a short cinereous pubescence, the antennæ ferruginous; the face depressed in front of the posterior ocelli, forming a sharp transverse edge; a tubercle in front of the anterior ocellus. Thorax shining, the wings hyaline at their base to about one-third of their length, beyond which they are dark purple, the apical margins paler, the legs entirely black; the abdomen black, shining and closely punctured, the apex fringed with pale pubescence.

Male.—Closely resembling the female, but having a fulvous pubescence on the clypeus; a tuft of white pubescence before the wings, and another on each side of the basal segment of the abdomen; the posterior tibiæ slightly curved, the basal joint of the tibiæ incrassate, and having a tuft of white pubescence at the

apex, the joint compressed above; the abdomen fringed with white pubescence, that at the extreme apex fuscous.

Hab. Northern India.

55. Xylocopa auripennis. B.M.

Xylocopa auripennis, *St. Farg. Hym.* ii. 181. 10.

Hab. Bengal; China.

56. Xylocopa chloroptera.

Xylocopa chloroptera, *St. Farg. Hym.* ii. 207. 56 ♀.

Hab. China.

57. Xylocopa Sinensis. B.M.

Female. Length 11 lines.—Black, the head closely and strongly punctured, the margins of the clypeus, and a central line, smooth and shining; the labrum has a tubercle in the centre; the flagellum, except the two basal joints, testaceous beneath; the margin of the vertex, the disk and sides of the thorax and the basal segment of the abdomen densely covered with bright yellow pubescence; the wings rufo-hyaline, their apical margins having a rufo-fuscous cloud, the nervures ferruginous; the tibiæ and tarsi clothed with bright rufo-fulvous pubescence. Abdomen very closely punctured, subopake, the apical margins of the segments very narrowly rufo-piceous; the sides of the abdomen fringed with black pubescence, at the extreme apex a little bright ferruginous pubescence.

Hab. China (Foo-chow-foo).

58. Xylocopa dissimilis. B.M.

Xylocopa dissimilis, *St. Farg. Hym.* ii. 180. 9.
Xylocopa lunulata, *St. Farg. Hym.* ii. 184. 14, var. ♂.

Hab. China; Madras.

59. Xylocopa pictifrons. B.M.

Xylocopa pictifrons, *Smith, Trans. Ent. Soc.* new ser. ii. 42.

Hab. North China.

60. Xylocopa rufipes. B.M.

Xylocopa rufipes, *Smith, Trans. Ent. Soc.* new ser. ii. 42.

Hab. North China.

61. Xylocopa cœrulea. B.M.

Bombus cœruleus, *Fabr. Syst. Piez.* p. 345. 9.
Xylocopa cœrulea, *St. Farg. Hym.* ii. 200. 46.

Hab. Java; East India.

62. Xylocopa Dejeanii. B.M.

Xylocopa (Schonnherria) Dejeanii, *St. Farg. Hym.* ii. 209. 59.

Hab. Java.

63. Xylocopa marginella.

Xylocopa marginella, *St. Farg. Hym.* ii. 205. 53.

Hab. Java.

64. Xylocopa mesoxantha. B.M.

Xylocopa mesoxantha, *St. Farg. Hym.* ii. 199. 45.

Hab. Java.

65. Xylocopa Philippinensis. B.M.

Female. Length 12 lines.—Black, the pubescence entirely black, except that on the basal segment of the abdomen and on each side of the metathorax, which is yellow; the wings dark fuscous, having a purple iridescence.

Hab. Philippine Islands.

66. Xylocopa dimidiata. B.M.

Xylocopa dimidiata, *St. Farg. Hym.* ii. 199. 44 ♀.

Hab. Isle of Timor; Australia (Cape Upstart; Port Essington; Macintyre River).

67. Xylocopa muscaria.

Apis muscaria, *Fabr. Ent. Syst.* ii. 339. 105 ♂.
Oliv. Ency. Méth. iv. 77. 88.
Centris muscaria, *Fabr. Syst. Piez.* p. 358. 20, and *Cab. Mus. Dom. Banks.*
Lestis muscaria, *St. Farg. Hym.* ii. 211. 1 ♂.

Hab. New Holland.

68. Xylocopa simillima. B.M.

Female. Length 10 lines.—Head and thorax black, a slightly

elevated carina passes forward from the anterior stemma and terminates opposite the insertion of the antennæ; the margins of the clypeus not raised; the labrum having a central quadrate tubercle. Thorax smooth and shining, having a beautiful violet iridescence; the metathorax sometimes having a ferruginous tinge; the wings dark fuscous, and having a violet iridescence; the legs entirely black. Abdomen: the three basal segments, sometimes the base of the fourth, red, their apical margins having a black band; sides of the abdomen having a fringe of black pubescence; the entire surface closely punctured beneath, the margins of the segments rufo-piceous.

Hab. Australia.

69. Xylocopa Brasilianorum. B.M.

Apis Brasilianorum, *Linn. Syst. Nat.* i. 961. 49 ♂.
Fabr. Ent. Syst. ii. 323. 40.
Xylocopa Brasilianorum, *Fabr. Syst. Piez.* p. 340. 11.
St. Farg. Hym. ii. 201. 47.

Hab. Brazil.

This insect is in all probability identical with the *X. teredo* of Guilding; there is nothing in the descriptions to separate them.

70. Xylocopa carbonaria. B.M.

Female. Length 8 lines.—Black, the head narrower than the thorax, closely and strongly punctured; the clypeus coarsely punctured, the margin raised posteriorly, and a little way on each side, not reaching the anterior margin; in the centre a narrow longitudinal smooth space, the labrum having three small tubercles. Thorax: the middle of the disk impunctate smooth and shining, beyond which it is strongly punctured, and densely clothed with short black pubescence; wings dark fuscous, and having a changeable violet iridescence; the legs entirely black. Abdomen very closely punctured, fringed at the sides with black pubescence, densely so towards the apex; beneath, strongly punctured and longitudinally subcarinate in the centre.

Hab. Brazil (Tapajos). (Coll. W. W. Bates.)

71. Xylocopa colona. B.M.

Xylocopa colona, *St. Farg. Hym.* ii. 185. 17.

Hab. Cayenne.

72. Xylocopa frontalis. B.M.

Apis frontalis, *Oliv. Ency. Méth.* iv. 64. 6 ♀.
Xylocopa frontalis, *Fabr. Syst. Piez.* p. 340. 8.
St. Farg. & Serv. Ency. Méth. x. 793. 1.
St. Farg. Hym. ii. 175. 1.

Hab. Brazil; Cayenne.

73. Xylocopa fimbriata. B.M.

Xylocopa fimbriata, *Fabr. Syst. Piez.* p. 340. 7.
St. Farg. Hym. ii. 177. 4.
Schomb. Faun. Flo. Brit. Guiana, iii. 591.
Xylocopa cornuta, *St. Farg. Hym.* ii. 176. 2, var. ♀.

Hab. Brazil; Cayenne.

74. Xylocopa fervens.

Xylocopa fervens, *St. Farg. Hym.* ii. 196. 39 ♀.

Hab. Brazil (Para). (Coll. F. Smith.)

75. Xylocopa fasciata. B.M.

Xylocopa fasciata, *St. Farg. Hym.* ii. 202. 48 ♂.

Hab. Brazil.

76. Xylocopa macrops.

Xylocopa (Schonnherria) macrops, *St. Farg. Hym.* ii. 209. 60 ♂.

Hab. Brazil.

77. Xylocopa mœrens.

Xylocopa? mœrens, *Perty, Del. An. Art.* p. 150. t. 28. f. 11 ♀.

Hab. Brazil (Province of Minarum).

78. Xylocopa morio. B.M.

Apis morio, *Fabr. Ent. Syst.* ii. 315. 2.
Xylocopa morio, *Latr. Ins.* iii. 380.
Fabr. Syst. Piez. p. 338. 2.
Halid. Trans. Linn. Soc. xvii. 319. 12.

Hab. Brazil.

This is probably the female of *X. Brasilianorum*.

79. Xylocopa splendidula.

Xylocopa splendidula, *St. Farg. Hym.* ii. 190. 29 ♀.
Hab. Brazil.

80. Xylocopa teredo.

Xylocopa teredo, *Guild. Trans. Linn. Soc.* xiv. 313. t. 8. f. 1 ♀, 5 ♂.
Westw. Nat. Libr. xxxviii. 268. t. 21. f. 1 ♂. 2 ♀.
Xylocopa Brasilianorum, *Fab.* ♂? X. morio, *Fab.* ♀?
Hab. Brazil.

81. Xylocopa viridis. B.M.

Male. Length 7 lines.—Green, the clypeus and sides of the face, the labrum, a line on the mandibles, the scape in front, and two or three of the basal segments of the flagellum in front, yellow; the face has a little pale pubescence intermixed with black hairs, the cheeks and margin of the vertex have a pale pubescence. Thorax shining, the middle of the disk sparingly punctured, thickly so on the sides, clothed with a pale fulvous pubescence; the wings subhyaline, the nervures and tegulæ ferruginous; the anterior legs beneath, and the joints of the intermediate and posterior pairs rufo-testaceous; the tarsi beneath have a fulvous pubescence; above, the legs have a mixed pubescence, pale fulvous on the anterior pair, the same on the intermediate tarsi, the posterior legs having some white on the posterior tarsi above, black within, and a mixture of fulvous beneath. Abdomen: the pubescence pale, thinly scattered, the apical segment having a black loose fringe; the apical margins of the segments narrowly bordered with white pubescence.
Hab. Brazil (Rio Tapajos).

82. Xylocopa xanthocnemis.

Xylocopa? xanthocnemis, *Perty, Del. An. Art.* p. 150. t. 28. f. 12 ♀.
Hab. Brazil.

83. Xylocopa Augusti. B.M.

Xylocopa Augusti, *St. Farg. Hym.* ii. 187. 21.
Hab. Brazil.

84. Xylocopa æneipennis. B.M.

Apis æneipennis, *De Geer, Mem.* iii. 573. 5. t. 28. f. 8.
Xylocopa æneipennis, *St. Farg. Hym.* ii. 186. 20.
Schomb. Faun. Flo. Brit. Guiana, p. 591.
Hab. Brazil; Cayenne.

85. Xylocopa grossa. B.M.

Centris grossa, *Drury, Ill. Exot. Ent.* i. 102. t. 45. f. 3.
Apis purpurascens, *Fabr. Ent. Syst.* ii. 325. 50.
Apis iricolor, *Kirby, Mon. Ap. Angl.* ii. 310. 72. t. 17. f. 9.
Xylocopa purpurascens, *Fabr. Syst. Piez.* p. 341. 15.
Xylocopa iricolor, *St. Farg. Hym.* ii. 185. 16.

Hab. South America.

86. Xylocopa pulchra.

Female. Length 6½ lines.—Head and thorax black, the face has a little fuscous pubescence, the flagellum beneath fulvo-testaceous. Thorax: the pubescence above sooty-black, the wings subhyaline, having a fulvous tinge, the nervures ferruginous; the anterior legs black, the intermediate tarsi have a mixture of pale pubescence; the posterior tarsi have the basal half of the first joint clothed above with pale ochraceous pubescence. Abdomen green, shining and finely punctured, the basal segment has a little ochraceous pubescence on each side, the apical margin of the second and three following segments have a fascia of pale ochraceous pubescence, broadly interrupted in the middle; the sides thinly fringed with black hairs, the extreme apex ferruginous.

Hab. Rio. (Coll. F. Smith.)

87. Xylocopa affinis.

Xylocopa (Schonnherria) affinis, *St. Farg. Hym.* ii. 210. 62.

Hab. Cayenne.

88. Xylocopa aurulenta. B.M.

Bombus aurulentus, *Syst. Piez.* p. 351. 42.
Xylocopa aurulenta, *St. Farg. Hym.* ii. 192. 33.

Hab. South America (Cayenne).

89. Xylocopa barbata. B.M.

Xylocopa barbata, *Fabr. Syst. Piez.* p. 341. 14.

Hab. South America; Cayenne; Brazil.

90. Xylocopa Cajennæ. B.M.

Xylocopa Cajennæ, *St. Farg. Hym.* ii. 203. 50.

Hab. Cayenne.

91. Xylocopa nitens.

Xylocopa nitens, *St. Farg. Hym.* ii. 176. 3.
Hab. Cayenne.

92. Xylocopa viridigastra.

Xylocopa viridigastra, *St. Farg. Hym.* ii. 186. 19.
Hab. Cayenne.

93. Xylocopa virescens.

Xylocopa virescens, *St. Farg. Hym.* ii. 186. 18.
Hab. Cayenne.

94. Xylocopa lateralis.

Xylocopa lateralis, *Say, Bost. Journ. Nat. Hist.* i. 413. 2.
Hab. Mexico.

95. Xylocopa tabaniformis. B.M.

Female. Length 8 lines.—Black, the face has a thin griseous pubescence, that on the cheeks dense and hoary; the flagellum beneath, except the two basal joints, rufo-testaceous. Thorax smooth and shining on the disk, the centre of which is sparingly pubescent, on the sides and beneath it is dense and hoary; the legs have a similar pubescence, the scopa above slightly ochraceous, beneath black; the apical joints of the tarsi ferruginous. Abdomen, the basal segment has a griseous pubescence, the intermediate segments have on each side a white marginal fringe, the fifth segment has on its lateral margins a white fringe, and the sixth is fringed with black; the wings subhyaline, the nervures dark fuscous, the tegulæ ferruginous.

Hab. Mexico.

96. Xylocopa Virginica. B.M.

Apis Virginica, *Drury, Ill. Exot. Ins.* i. t. 43. f. 1.
Linn. Mant. Plant. p. 540.
Fabr. Ent. Syst. ii. 318. 15.
Bombus Virginicus, *Fabr. Syst. Piez.* p. 346. 14.
St. Farg. Hym. i. 470. 17.
Xylocopa Virginica, *Westw. in Drury, Ill. Exot. Ins.* (1837) i. t. 43. f. 1.

Hab. Virginia.

97. Xylocopa Carolina. B.M.

Centris Carolina, *Fabr. Syst. Piez.* 357. 14.
Xylocopa Carolina, *Say, Bost. Journ. Nat. Hist.* i. 412. (Schonnherria), *St. Farg. Hym.* ii. 207. 57.

Hab. United States; St. John's Bluff, East Florida.

98. Xylocopa micans. B.M.

Xylocopa (Schonnherria) micans, *St. Farg. Hym.* ii. 208. 58 ♂.
Xylocopa vidua, *St. Farg. Hym.* ii. 210. 61 ♀ (*type in Coll. Westw.*).

Hab. N. America; St. John's Bluff, East Florida.

99. Xylocopa obscura.

Xylocopa obscura, *St. Farg. Hym.* ii. 188. 25.

Hab. N. America?

100. Xylocopa phalothorax.

Xylocopa phalothorax, *St. Farg. Hym.* ii. 194. 37.

Hab. ——? (Coll. F. Smith.)

101. Xylocopa divisa. B.M.

Xylocopa divisa, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 264.

Hab. ——?

Genus 54. LESTIS.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Lestis, *St. Farg. Hym.* ii. 211 (1841).

Head transverse, as wide as the thorax; scape subfiliform, two-thirds of the length of the flagellum, the latter filiform; the ocelli placed in a triangle on the vertex. The labial palpi 4-jointed, shorter than the labium, about two-thirds of the length of the labium, which is very pubescent; the basal joint of the palpi elongate, thrice the length of the second joint, the two apical joints minute, placed continuous with the two basal ones. The maxillary palpi 4-jointed, gradually tapering from the base to the apex; the basal joint stout, about half the length of the second joint, the third shorter than the basal joint, the apical one slender, minute. The superior wings have one marginal and three submarginal cells; the marginal cell as long as the three submarginals, very narrow, and having a short abbreviated nervure at its apex; the second submarginal cell scarcely

half the width of the first, the third submarginal cell longer than the first, widest at its apex; the first recurrent nervure uniting with the second transverse nervure; the second recurrent nervure received by the third submarginal cell a little beyond the middle.

1. Lestis bombylans. B.M.

Apis bombylans, *Fabr. Ent. Syst.* ii. 338. 104 ♀, and *Cab. Mus. Linn. Soc.*

Lestis bombylans, *Smith, Trans. Ent. Soc. Lond.* i. 1. new ser.

Hab. Australia.

The *Centris muscaria* of Fabricius is a *Xylocopa* ♂.

2. Lestis æratus. B.M.

Lestis æratus, *Smith, Trans. Ent. Soc. Lond.* i. new series.

Hab. Australia; Hunter River; Van Diemen's Land.

Genus 55. EXOMALOPSIS.

Exomalopsis, *Spin. Mem. Accad. Torino*, xiii. 89 (1851).

Head as wide as the thorax, the ocelli placed in a line on the vertex. The labial palpi 4-jointed, the two basal joints elongate, the first twice the length of the second, the third and fourth minute, placed at the side and near the apex of the second joint. The maxillary palpi 6-jointed, the three basal joints of about equal length, the three apical joints gradually decreasing in length. The superior wings having one marginal and three submarginal cells, the second submarginal cell small, subquadrate; the first recurrent nervure uniting with the second transverse cubital nervure, the second recurrent nervure received near the apex of the third submarginal cell, which is narrowed towards the marginal cell. The posterior tibiæ furnished with a dense pollen-brush; the calcaria simple, the claws bifid. The abdomen globose.

1. Exomalopsis auropilosa. B.M.

Exomalopsis auropilosa, *Spin. Mem. Accad. Torino*, p. 89. 72.

Hab. Brazil (Para).

2. Exomalopsis analis.

Exomalopsis analis, *Spin. Mem. Accad. Torino*, xiii. 91. 73.

Hab. Para.

3. Exomalopsis pilosa. B.M.

Male. Length 3 lines.—Black, the face clothed with silvery white pubescence, the flagellum rufo-piceous, the mandibles ferruginous. Thorax clothed with pale pubescence; the wings subhyaline, the nervures and tegulæ pale rufo-testaceous; the legs rufo-piceous, the tarsi pale rufo-testaceous, clothed with long loose pale glittering pubescence. Abdomen ovate, rufo-piceous, clothed with a silvery pubescence; the second segment has on each side an oblique line of silvery pubescence, the third and following segments densely clothed with short silvery pubescence; beneath the margins fringed with long pale pubescence.

Hab. Brazil.

4. Exomalopsis villipes.

Female. Length 3½ lines.—Black; the face has a thin pale fulvous pubescence, the mandibles ferruginous, ciliated beneath with long hairs; the flagellum fulvo-testaceous beneath. Thorax above thinly clothed with pale fulvous pubescence; the legs rufo-piceous, the intermediate and posterior tarsi, as well as the posterior tibiæ, fulvous; the anterior and intermediate tarsi have a fulvous pubescence; the posterior legs have a dense scopa of long pubescence, that on the basal half of the tibiæ fulvous, the apical half sooty-black, beneath entirely fulvous. The wings subhyaline, the nervures pale testaceous. Abdomen ovate, smooth and shining, and beyond the second segment covered with a pale golden pubescence.

Hab. Brazil. (Coll. F. Smith.)

5. Exomalopsis testacea.

Female. Length 3 lines.—Head and thorax rufo-testaceous, the flagellum and labrum pale testaceous. Thorax: the wings clear hyaline, the nervures and tegulæ pale testaceous, the disk margined with yellowish-white pubescence; legs pale testaceous; the posterior legs have a dense yellowish-white scopa. Abdomen pale ferruginous, the second and third segments have on each side an oblique line of white pubescence, the sides and the apex fringed with white pubescence.

Hab. Brazil. (Coll. F. Smith.)

Genus 56. TETRAPEDIA.

Tetrapedia, *Klug*, *Berl. Mag.* iv. 33 (1810).
Ancyloscelis, *Latr. Fam. Nat.* p. 464 ? (1825).

1. Tetrapedia diversipes. B.M.

Tetrapedia diversipes, *Klug, Berl. Mag.* iv. 35. t. 1. f. 2.

Hab. Brazil.

2. Tetrapedia bicolor.

Female. Length 3 lines.—Head and thorax black, the anterior margin of the clypeus, the labrum and mandibles, the cheeks and antennæ ferruginous, the former obscurely so. Thorax: the wings testaceo-hyaline, the nervures pale testaceous, becoming darker towards the base of the wings; the legs dark rufo-piceous, the posterior pair densely clothed with black pubescence. Abdomen ferruginous, the apex having a thin black pubescence.

Hab. Brazil. (Coll. F. Smith.)

3. Tetrapedia atripes.

Female. Length 5 lines.—Black, the flagellum piceous beneath; the mandibles have a testaceous spot near their apex; the thorax finely punctured, and thinly clothed with short black pubescence; the metathorax rounded, shining, and finely punctured; the legs have a black pubescence, the posterior tibiæ and tarsi densely clothed with long black pubescence.

Hab. Mexico. (Coll. F. Smith.)

4. Tetrapedia testacea.

Female. Length 3 lines.—Testaceous, the labrum and mandibles pale yellow testaceous; the antennæ pale beneath. Thorax: two longitudinal pale yellow lines on the disk, an epaulet over the tegulæ yellow, the scutellum paler than the disk; wings subhyaline, the nervures testaceous; the legs pale testaceous; the posterior legs densely clothed with golden-yellow pubescence.

Hab. Brazil (Para). (Coll. F. Smith.)

5. Tetrapedia nasuta.

Male. Length 3 lines.—Head and thorax black, the clypeus anteriorly, the labrum, mandibles, and scape in front, yellowish-white, the flagellum rufo-testaceous beneath, the inner orbits of the eyes white. Thorax: the disk has two obscure pale lines; the wings testaceo-hyaline, the nervures pale testaceous; the thorax beneath testaceous, the legs testaceous; the intermediate and posterior tibiæ darkest, clothed with black pubescence. Abdomen fulvo-testaceous, the margins of the segments darkest.

Hab. Brazil. (Coll. F. Smith.)

Genus 57. ANCYLOSCELIS.

Ancyloscelis, *Latr. Fam. Nat.* p. 463 (1825).
Tetrapedia, *Klug, Berl. Mag.* p. 33? (1810).

1. ANCYLOSCELIS URSINUS.

Ancyloscelis ursinus, *Hal. Trans. Linn. Soc.* xvii. 320. 16.
Hab. Brazil (St. Paul's). (Coll. W. W. Saunders, Esq.)

2. ANCYLOSCELIS ORNATUS.

Ancyloscelis ornata, *Spin. Mem. Accad. Torino*, xiii. 87. 69 (1851).
Hab. Brazil (Para).

3. ANCYLOSCELIS ARMATUS.

Male. Length 2½ lines.—Black, the face has a thin ochraceous pubescence, the antennæ rufo-piceous beneath, the scape ferruginous; the anterior margin of the clypeus, the labrum and mandibles pale testaceous, the latter ferruginous at their tips. Thorax: the pubescence on the disk ochraceous, on the sides and beneath it is cinereous; the tegulæ and costal nervure rufo-testaceous; wings hyaline, the nervures black; the posterior coxæ and femora incrassate, the latter flattened beneath, and having a raised carina or margin on each side; the tibiæ incrassate, less so than the femora; the tarsi and the apex and extreme base of the tibiæ ferruginous; the posterior tarsi have a stout curved tooth at their base beneath. Abdomen subovate, the apical margins of the segments having a fascia of white pubescence.
Hab. Brazil. (Coll. F. Smith.)

4. ANCYLOSCELIS LINEATUS.

Ancyloscelis lineata, *Spin. Mem. Accad. Torino*, xiii. 87. 70 (1851).
Hab. Para.

5. ANCYLOSCELIS NIGRIPES.

Ancyloscelis nigripes, *Spin. Mem. Accad. Torino*, xiii. 88. 71 (1851).
Hab. Para.

Genus 58. EPICHARIS.

Apis, pt., *Oliv. Ency. Méth.* iii. (1792).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Epicharis, *Klug, Illig. Mag.* vi. (1807).

1. Epicharis rustica. B.M.

Apis rustica, *Oliv. Ency. Méth.* iii. 8 ♀.
Apis hirtipes, *Fabr. Ent. Syst.* ii. 325. 49.
Centris hirtipes, *Fabr. Syst. Piez.* p. 355. 4.
Epicharis dasypus, *Klug, Illig. Mag.* vi. 226.
Blanch. Hist. nat. des Ins. iii. 405.
Schomb. Faun. Flo. Brit. Guiana, p. 591.
Epicharis rustica, *St. Farg. Hym.* ii. 170. 1, *and type sp. in Coll. Westw.*

Hab. Cayenne; Brazil.

2. Epicharis Dejeanii. B.M.

Epicharis Dejeanii, *St. Farg. Hym.* ii. 171. 2 ♀, *and type sp. in Coll. Westw.*
Epicharis fasciata, *St. Farg. Hym.* ii. 172. 4 ♂, *and type sp. in Coll. Westw.*

Hab. Brazil; Cayenne.

3. Epicharis analis.

Epicharis analis, *St. Farg. Hym.* ii. 173. 5.

Hab. Brazil?

4. Epicharis umbraculata. B.M.

Centris umbraculata, *Fabr. Syst. Piez.* 355. 5.
Epicharis umbraculata, *Klug, Illig. Mag.* vi. 226.
Epicharis Cajennæ, *St. Farg. Hym.* ii. 172. 3, *and type sp. in Coll. Westw.*

Hab. Brazil (Santarem); Cayenne.

5. Epicharis bicolor. B.M.

Male. Length 8 lines.—Black, a triangular spot at the anterior angles of the face, the scape in front and the labrum yellow; a pale yellow testaceous spot near the apex of the mandibles, sometimes two minute yellow spots at the base of the clypeus; thorax clothed above with dark cinereous pubescence, that on the sides, beneath, on the femora, anterior and intermediate tibiæ, black; the posterior tibiæ and basal joint of the tarsi above yellow, beneath they are black, as well as the apical joints of the tarsi, the claws ferruginous, their tips black; the wings fuscous, the tegulæ having an obscure yellow spot on each side. Abdomen orange-yellow, the margins of the segments pale rufo-testaceous.

Hab. Brazil.

6. Epicharis zonata.

Male. Length 9 lines.—Head and thorax black, the scape in front, the face below the insertion of the antennæ white, the labrum white; a triangular black spot on each side of the clypeus; the pubescence on the cheeks white; that on the vertex, and that on the disk of the thorax of a grisco-fuscous mixture, at the sides of the metathorax it is whitish, that on the breast black; the posterior margin of the scutellum deeply emarginate; the wings fusco-hyaline; the legs have a fuscous pubescence beneath, the intermediate and posterior tibiæ and tarsi fringed behind with long pale yellow pubescence, the apical joints of the tarsi pale testaceous; the claws, and also the calcaria ferruginous, the latter serrated on their inner margins. Abdomen yellow, the apical margins of the segments have a narrow fusco-ferruginous band.

Hab. Brazil.

Genus 59. CENTRIS.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Trachina, *Klug, Illig. Mag.* vi. (1807).
Hemisia, *Klug, Illig. Mag.* vi. (1807).

1. Centris hæmorrhoidalis. B.M.

Apis hæmorrhoidalis, *Fabr. Ent. Syst.* ii. 339. 106 ♀.
Centris hæmorrhoidalis, *Fabr. Syst. Piez.* p. 359. 23.
Centris tabaniformis, *Fabr. Syst. Piez.* p. 358. 21 ♂.
Hemisia hæmorrhoidalis et tabaniformis, *Klug, Illig. Mag.* vi. 227.

Hab. Brazil; St. Domingo.

2. Centris flavifrons. B.M.

Apis flavifrons, *Fabr. Ent. Syst.* ii. 329. 66 ♀.
Anthophora flavifrons, *Fabr. Syst. Piez.* p. 375. 15.
Centris flavifrons, *St. Farg. Hym.* ii. 152. 6, *and type sp. in Coll. Westw.*

Male. Length 8 lines.—This sex closely resembles the female, but differs in having the face below the insertion of the antennæ and the mandibles yellow, the latter black at their tips; the clypeus has on each side a large black lunate spot; the anterior and intermediate tibiæ have a yellow stripe above.

Hab. Brazil.

3. Centris Langsdorfii. B.M.

Centris Langsdorfii, *St. Farg. MSS.* (*Blanch.*) *Hist. nat. des Ins.* iii. 1. 405. t. 7. f. 7 ♀.

The male of this species closely resembles the female, the pubescence of the thorax being of a deeper fulvous tint, the scape in front, the clypeus and labrum being pale testaceous.

Hab. Brazil.

4. Centris ænea.

Centris ænea, *St. Farg. Hym.* ii. 163. 26 ♀.

Hab. Brazil. (Coll. J. S. Baly, Esq.)

5. Centris bicolor.

Centris bicolor, *St. Farg. Hym.* ii. 163. 25 ♀

Hab. Brazil.

6. Centris bimaculata.

Centris bimaculata, *St. Farg. Hym.* ii. 168. 36 ♀

Hab. Brazil.

7. Centris collaris.

Centris collaris, *St. Farg. Hym.* ii. 162. 24 ♀

Hab. Brazil (St. Paul's).

8. Centris chrysitis.

Centris chrysitis, *St. Farg. Hym.* ii. 162. 23 ♀.

Hab. Brazil (St. Paul's).

9. Centris ferruginea.

Centris ferruginea, *St. Farg. Hym.* ii. 156. 12 ♀, *and type sp. in Coll. Westw.*

Centris longimana, *Fabr. Syst. Piez.* 356. 6 ♂?

Hab. Brazil.

10. Centris fuscata.

Centris fuscata, *St. Farg. Hym.* ii. 167. 34 ♂.

Hab. Brazil (St. Paul's).

11. Centris furcata.

Bombus furcatus, *Fabr. Syst. Piez.* p. 350. 41 ♀.
Centris furcata, *St. Farg. Hym.* ii. 151. 3, *and type sp. in Coll. Westw.*
Blanch. Hist. nat. des Ins. iii. 405. 1. t. 7. f. 6.

Hab. Brazil.

12. Centris nitens.

Centris nitens, *St. Farg. Hym.* ii. 163. 27.

Hab. Brazil.

13. Centris punctata.

Centris punctata, *St. Farg. Hym.* ii. 169. 37 ♀ (nec *Fabr.*).

Hab. Brazil.

14. Centris pulverata.

Centris pulverata, *St. Farg. Hym.* ii. 161. 22 ♀.

Hab. Brazil (St. Paul's).

15. Centris rufa. B.M.

Centris rufa, *St. Farg. Hym.* ii. 153. 8 ♀, *and type sp. in Coll Westw.*

Hab. Brazil.

16. Centris thoracica.

Centris thoracica, *St. Farg. Hym.* ii. 158. 16 ♀.

Hab. Brazil.

17. Centris vitta.

Centris vitta, *St. Farg. Hym.* ii. 168. 35 ♂ ♀

Hab. Brazil.

18. Centris violacea.

Centris violacea, *St. Farg. Hym.* ii. 151. 4 ♀ (*type sp. in Coll. Westw.*).

Hab. Brazil.

19. Centris modesta. B.M.

Male. Length 9 lines.—Black, the apex of the mandibles pale yellow testaceous, the thorax densely clothed above with

dark brown pubescence, palest on the posterior margin of the scutellum; the wings dark fuscous, having a slight violet iridescence; the legs black. Abdomen, the two basal segments have a black pubescence, that on the following segments being of a pale reddish-brown.

Hab. Brazil.

20. Centris maculifrons. B.M.

Female. Length 7 lines.—Head and thorax black; the clypeus has a broad transverse stripe anteriorly, united to a perpendicular one yellow; the face on each side of the clypeus, the labrum and mandibles yellow, the latter black at their tips, the anterior margin of the clypeus black; the face has a little pale pubescence at the insertion of the antennæ and at the sides of the face; that on the disk of the thorax anteriorly fuscous, posteriorly pale yellow, the collar, sides and thorax beneath pale yellow; the legs dark rufo-testaceous; the anterior tibiæ fringed behind with a thin pale pubescence, that on the tarsi brown; the intermediate and posterior legs have a black pubescence. Abdomen metallic green, the basal segment clothed with pale pubescence; the apical margin of the third segment, the fourth and fifth have a pale golden pubescence, the sixth segment fringed with bright golden hairs.

Hab. Brazil.

21. Centris decorata. B.M.

Male. Length 11 lines.—Black, the clypeus and labrum pale testaceous, their margins more or less fuscous; the disk of the thorax clothed with short black pubescence, encircled with bright yellow; this colour also adorns the metathorax, the sides of the thorax and the breast; the wings nearly black, and having a violet iridescence; the legs black. Abdomen: the base has on each side a little pale yellow pubescence, the second, third and fourth segments clothed with olive-green pubescence; their basal and apical margins have a narrow border of black, the apical segment fringed with long black pubescence.

Hab. Brazil.

22. Centris rubella.

Female. Length 8 lines.—Head and thorax black; the face has a little white pubescence on each side, a tuft between the ocelli, and the cheeks densely clothed with white; the labrum has a bright golden pubescence, the clypeus has a large testaceous

spot on each side, and the mandibles a similar spot near their apex. Thorax: the disk covered with very short black pubescence, a little pale pubescence on each side of the collar, a tuft behind the wings; the metathorax has laterally a little fuscous pubescence; the legs rufo-testaceous, the anterior and intermediate pairs fuscous above, their tarsi densely clothed with rufous pubescence; the scopa on the posterior legs bright fulvo-ochraceous above, beneath having a ferruginous stain; wings dark fuscous, with a purple iridescence. Abdomen ferruginous.

Hab. Brazil (Rio Tapajos).

23. Centris plumipes. B.M.

Female. Length 9 lines.—Black, the head and thorax black, the former having a purple or æneous tinge on the face and vertex; the clypeus on each side, as well as the anterior angles of the face, the labrum and mandibles pale testaceous; the cheeks densely clothed with cinereous pubescence; there is also a little short cinereous pubescence between the antennæ. Thorax: the middle of the disk has an æneous tinge, densely clothed above and at the sides with a short black pubescence, beneath it is pale bright ochraceous; the legs have more or less of an æneous tinge above; the anterior and intermediate legs above, have their pubescence black, that on the tarsi beneath reddish-brown; the posterior tibiæ and tarsi pale rufo-testaceous, densely clothed exteriorly with long pale ochraceous pubescence, the hairs beautifully pectinated or plumose; the wings dark fuscous, beautifully tinged with a purple iridescence. Abdomen olive-green at the base, gradually becoming coppery towards the apex.

The male only differs in having the clypeus and labrum entirely pale testaceous, the former having a broad spathuliform black mark in the middle.

Hab. Brazil (Santarem).

24. Centris flavopicta. B.M.

Male. Length 10 lines.—Head and thorax black, the latter as well as the cheeks covered with cinereous pubescence; the scape in front, the anterior margin of the clypeus and a perpendicular line uniting with it, a transverse line above it, the sides of the face, the labrum and mandibles yellow, the latter ferruginous at their tips; the legs yellow, the femora black at their base, and the tibiæ having a black spot above; the pubescence on the legs fulvous; the wings smoky, towards their apical margins subhyaline. Abdomen yellow, the margins of the segments rufo-piceous, having more or less of a metallic tinge; the apex

thinly covered with fulvous pubescence, beneath thickly covered with pale fulvous pubescence.

Hab. Brazil (Ega).

25. Centris difformis. B.M.

Female. Length 9 lines.—Head and thorax black, the flagellum beyond the third joint fulvous beneath; the clypeus short, transverse and elevated, its anterior portion vertical, having a transverse pale testaceous depression; the labrum pale testaceous, having two longitudinal fuscous stripes; the mandibles large, very broad at their base, and armed above with a stout tooth, their apex bidentate, having a longitudinal pale testaceous stripe; the cheeks densely clothed with white pubescence; between the antennæ and on each side of the face below their insertion, a little white pubescence, that on the vertex black. Thorax clothed with fuscous pubescence at the sides, beneath it is cinereous; the legs dark rufo-testaceous, the posterior pair ferruginous; the tibiæ and basal joint of the tarsi densely clothed exteriorly with bright fulvous pubescence; the anterior and intermediate tarsi have a fulvous pubescence; the wings smoky. Abdomen ferruginous, the base having a little cinereous pubescence, that at the apex ferruginous.

Hab. Brazil (Rio Tapajos).

26. Centris dentata.

Male. Length 7½ lines.—Black, the scape, clypeus, labrum and mandibles yellow, at the base of the clypeus two abbreviated black stripes; the flagellum rufo-testaceous beneath; the cheeks densely clothed with pale pubescence, that on the vertex fulvous. Thorax clothed with fulvous pubescence, palest on the metathorax; the wings subhyaline, the tegulæ pale testaceous; the legs rufo-testaceous, the posterior pair much darker than the others, their femora incrassate, and armed in the middle beneath with a short stout curved spine; the tibiæ and basal joint of the posterior tarsi densely fringed with black pubescence. Abdomen, the base and the apical segments clothed with fulvous pubescence.

Hab. Brazil (Rio Tapajos).

27. Centris sponsa.

Female. Length 11 lines.—Black, the collar has a broad band of short ochraceous velvety pubescence, which is continued down the sides, not beneath; the metathorax has a mixture of ochreous pubescence; the wings dark fuscous, opake, and having a metallic-green iridescence; legs black. Abdomen, the first

and second segments densely clothed with a short velvety ochraceous pubescence, inclining to an olive-yellow; the apical margin of the basal segment, and the basal margin of the second, narrowly black.

Hab. Columbia.

This is probably the female of *C. decorata*.

28. Centris insignis.

Female. Length 11 lines.—Black, the head ferruginous, the front above the insertion of the antennæ testaceous, the scape and two basal joints of the flagellum ferruginous; the apical half of the mandibles black; the pubescence on the head, thorax and legs fulvous; the wings dark fuscous, and having a violet iridescence; the legs ferruginous. Abdomen, the second segment densely clothed with very short pale yellow pubescence; a patch of the same at the extreme lateral margins of the third segment.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

29. Centris festiva.

Female. Length 9 lines.—Head and thorax black, a tuft of pale pubescence between the antennæ, and a pale testaceous spot on the mandibles near their apex. Thorax densely clothed with short dark olive pubescence, the wings rather dark fusco-hyaline: the posterior legs have dense scopæ of long fulvo-ochraceous pubescence. Abdomen of a rather obscure metallic-green; the base has a little short cinereous pubescence; the margin of the second segment narrowly and the third more broadly testaceous, the former having a pale and the latter a bright fulvous pubescence; the fourth and fifth have a pale pubescence intermixed with black hairs; the apical segment fringed with bright ferruginous hairs; the sixth segment ferruginous.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

30. Centris Americanorum.

Ptilotopus Americanorum, *Klug, Mag. Berlin*, 1810, p. 32. t. 1. f. 1.
Centris Americanorum, *St. Farg. Hym.* ii. 156. 13 (nec *Bombus Americanorum*, Fabr.).

Hab. Cayenne.

31. Centris bombyformis.

Hemisia bombyformis. *Spin. Ann. Soc. Ent. Fr.* x. 148. 100 ♀ (1841).

Hab. Cayenne.

32. Centris clypeata.

Centris derasa, *St. Farg. Hym.* ii. 150. 2 ♀ (*and type sp. in Coll. Westw.*).
Centris clypeata, *St. Farg. Hym.* ii. 157. 14 ♂.
Guér. Icon. Règ. Anim. Ins. p. 455. t. 74. 6.
Centris emarginata, *St. Farg. Hym.* ii. 157. 15. var. ♀?

Hab. Cayenne.

33. Centris denudans. B.M.

Centris denudans, *St. Farg. Hym.* ii. 150. 1 ♀ (*and type sp. in Coll. Westw.*).
Trachina denudans, *Schomb. Faun. Flo. Brit. Guiana*, 591.

Hab. Cayenne; Brazil (Rio Tapajos).

34. Centris emarginata. B.M.

Centris emarginata, *St. Farg. Hym.* ii. 157. 15 ♀.

Hab. Cayenne.

35. Centris lanipes.

Apis lanipes, *Fabr. Ent. Syst.* ii. 340. 113 ♀.
Centris lanipes, *Fabr. Syst. Piez.* p. 360. 29.
St. Farg. Hym. ii. 165. 29 (*sp. in Coll. Westw.*).
Hemisia lanipes, *Klug, Illig. Mag.* vi. 227.

Hab. Cayenne; Brazil.

36. Centris longimana.

Centris longimana, *Fabr. Syst. Piez.* p. 356. 6.
St. Farg. Hym. ii. 164. 28.
Trachina longimana, *Klug, Illig. Mag.* vi. 226.

Hab. Cayenne.

37. Centris laticincta.

Hemisia laticincta, *Spin. Ann. Soc. Ent. Fr.* x. 148. 98 ♀ (1841).

Hab. Cayenne.

38. Centris lineolata. B.M.

Centris lineolata, *St. Farg. Hym.* ii. 158. 17 ♀.
Trachina lineolata, *Klug, Illig. Mag.* vi. 183.

Hab. Cayenne.

39. Centris nigrescens.

Centris nigrescens, *St. Farg. Hym.* ii. 166. 32 ♂.

Hab. Cayenne.

40. Centris obsoleta. B.M.

Centris obsoleta, *St. Farg. Hym.* ii. 153. 7 ♀ (*and type sp. in Coll. Westw.*).

The male has the thorax irregularly garnished with lines of pale yellow pubescence.

Hab. Cayenne; Brazil (Rio Tapajos and the Amazons).

41. Centris pyropyga.

Hemisia pyropyga, *Spin. Ann. Soc. Ent. Fr.* x. 148. 99 ♀ (1841).

Hab. Cayenne.

42. Centris scapulata.

Centris scapulata, *St. Farg. Hym.* ii. 159. 18 ♀.

Hab. Cayenne; Columbia. (Coll. W. W. Saunders, Esq.)

43. Centris pœcila.

Centris pœcila, *St. Farg. Hym.* ii. 154. 10 ♀ (*type sp. in Coll. Westw.*).

Hab. Havannah.

44. Centris fasciata. B.M.

Female. Length 7 lines.—Head and thorax black; the clypeus has a somewhat curved transverse fascia, from the middle of which a line terminating in a point passes upwards to the base; the face on each side, the labrum and mandibles yellow, the latter black at their tips; the scape yellow in front, the flagellum, except the two basal joints, testaceous beneath. Thorax clothed above with fulvo-ochraceous pubescence, paler on the metathorax and beneath; legs rufo-testaceous; tibiæ and tarsi clothed above with fulvo-ochraceous pubescence, that on the tarsi brightest; wings hyaline and iridescent; the basal segment of the abdomen of a metallic green, the following segments yellow, their apical margins having a fascia of a rufo-testaceous colour, having a metallic green tinge; beneath reddish-yellow, the third and fourth segments having a transverse fuscous stain.

Male.—Rather smaller, but closely resembling the female, differing only in having the yellow of a brighter colour on the

face, the clypeus having merely a dark line on each side; the scutellum pale testaceous; the anterior femora in front, towards their apex, and the tibiæ above having a yellow line; the intermediate and posterior tibiæ have a spot at their base, and the femora a yellow spot near their apex beneath; otherwise as in the other sex.

Hab. Jamaica.

45. Centris ephippium. B.M.

Male. Length 9 lines.—Black, the labrum and clypeus pale yellow testaceous, the margins of the latter fuscous; the labrum densely clothed with a short pale woolly pubescence; the mandibles have a pale testaceous spot near their apex. Thorax: the disk behind the insertion of the wings densely clothed with short ochraceous pubescence, the scutellum clothed with the same; the sides of the metathorax, the thorax beneath, the legs and abdomen, entirely black.

Hab. Venezuela.

46. Centris cineraria. B.M.

Female. Length 7 lines.—Head and thorax black, the thorax clothed above with short white pubescence, on the sides and beneath it is black; the legs have also a black pubescence; the wings subhyaline, their nervures black. Abdomen blue-black, fringed at the sides and apex with black hairs.

Hab. Chili.

47. Centris Mexicana.

Female. Length 7 lines.—Black, the three basal joints of the antennæ rufo-testaceous, the thorax densely clothed with ochraceous pubescence; wings fuscous, palest towards their margins; the legs have a black pubescence, that on the posterior pair very long and dense. Abdomen, the basal segment covered with pale ochraceous pubescence; the apex fringed with black.

Hab. Mexico.

48. Centris aterrima. B.M.

Male. Length 8 lines.—Entirely black, the pubescence of a sooty-black; the labrum rugose. Thorax: the wings dark fuscous, paler towards their apical margins. Abdomen shining, delicately reticulated, and sparingly covered with pubescence; at the sides and at the apex it is more dense.

Hab. Mexico.

49. Centris versicolor. B.M.

Apis versicolor, *Fabr. Ent. Syst.* ii. 340. 111 ♀.
Centris versicolor, *Fabr. Syst. Piez.* p. 359. 25.
St. Farg. Hym. ii. 154. 9 (*sp. in Coll. Westw.*).
Centris tabaniformis, *Fabr. Syst. Piez.* p. 358. 21 ♂.
Hemisia versicolor, *Klug, Illig. Mag.* vi. 227.
Centris decolorata, *St. Farg. Hym.* ii. 160. 19 ♂ (*type sp. in Coll. Westw.*).

Hab. South America.

50. Centris testacea.

Centris testacea, *St. Farg. Hym.* ii. 165. 30 ♀.

Hab. South America.

51. Centris trigonoides.

Centris trigonoides, *St. Farg. Hym.* ii. 167. 33 ♂.

Hab. South America.

52. Centris picea. B.M.

Centris picea, *St. Farg. Hym.* ii. 166, 31 ♀.

Hab. S. America (Napo).

53. Centris maculata.

Centris maculata, *St. Farg. Hym.* ii. 160. 20 ♀ (*type sp. in Coll. Westw.*).

Very closely allied to *C. versicolor*, if not indeed a variety, the only difference being in the maculation of the face.

Hab. South America.

54. Centris dorsata.

Centris dorsata, *St. Farg. Hym.* ii. 161. 21 ♀.

Hab. South America.

55. Centris analis.

Centris analis, *St. Farg. Hym.* ii. 152. 5 ♀.
Centris nobilis, *Westw. Nat. Libr.* xxxviii. 263. t. 20. f. 1.

Hab. S. America.

56. Centris Chiliensis.

Hemisia chiliensis, *Spin. Faun. Chil.* vi. 167. 1.

Female. Length 6 lines.—Black; abdomen above smooth and shining, the disk of the thorax densely clothed with yellowish-white pubescence; wings hyaline, the nervures obscure.

Hab. Chili.

57. Centris nigerrima.

Hemisia nigerrima, *Spin. Faun. Chil.* vi. 167. 2.

Female. Length 6 lines.—Closely resembling *H. chiliensis*, but the pubescence of the thorax and abdomen is black.

Hab. Chili.

Genus 60. EUGLOSSA.

Apis, pt., *Linn. Syst. Nat.* i. 953.
Euglossa, *Latr. Hist. nat. des Cr. et Ins.* iii. 384 (1802).
Eulema (and Euglossa), *St. Farg. Hym.* ii. 11 (1841).

1. Euglossa dimidiata. B.M.

Apis dimidiata, *Fabr. Ent. Syst.* ii. 316. 6.
Centris dimidiata, *Fabr. Syst. Piez.* p. 354. 1.
Schomb. Faun. Flo. Brit. Guiana, p. 519.
Euglossa dimidiata, *Perty, Del. An. Art.* p. 151. t. 28. f. 14 ♀.
Eulema dimidiata, *St. Farg. Hym.* ii. 12. 2.

Hab. Brazil; Cayenne.

2. Euglossa cordata. B.M.

Apis cordata, *Linn. Syst. Nat.* i. 955. 15.
De Geer, Ins. iii. t. 28. f. 5.
Fabr. Ent. Syst. ii. 339. 109.
Euglossa cordata, *Latr. Hist. nat. Crust. et Ins.* iii. 384.
Fabr. Syst. Piez. p. 363. 3.
St. Farg. Hym. ii. 9. 1.
Schomb. Faun. Brit. Guiana, p. 592.
Cnemidium viride, *Perty, Del. An. Art.* p. 149. t. 28. f. 9 ♂.

Hab. Brazil (Para); Cayenne.

3. Euglossa analis. B.M.

Euglossa analis, *Westw. Nat. Lib.* xxxviii. p. 262. pl. 19. f. 2.

Hab. Brazil (Santarem).

4. Euglossa piliventris. B.M.

Euglossa piliventris, *Guér. Icon. Règ. Anim.* p. 458. 4 ♂ & ♀.
Hab. Para.

5. Euglossa Romandii. B.M.

Euglossa Romandii, *Guér. Icon. Règ. Anim.* p. 458. 5.
Hab. Brazil.

6. Euglossa fallax. B.M.

Female. Length 9 lines.—Black, the head and thorax clothed with short black pubescence; the clypeus has a central raised sharp carina, which passes also down the middle of the labrum; the latter has another carina on each side; the posterior tibiæ compressed and broadly dilated. Abdomen densely clothed with short fulvo-ochraceous pubescence, palest towards the apex.

Male. Length 9 lines.—Black, the head and thorax having a vivid golden-green effulgence; the clypeus has a central raised carina; the thorax has a short black pubescence; the wings subhyaline, smoky towards their base; the legs have more or less of a blue or coppery effulgence; the posterior tibiæ broadly dilated, convex exteriorly, flat within.

Hab. Brazil (Para).

7. Euglossa pulchra. B.M.

Female. Length 8 lines.—Head of a brilliant golden-green, the margins of the clypeus slightly raised at the sides anteriorly, and having a smooth impunctate line down the centre; the antennæ black; the thorax and two basal segments of the abdomen of a beautiful purple, smooth and shining; the thorax anteriorly clothed with short black pubescence; the legs black, the posterior tibiæ broadly dilated and concave exteriorly, the basal joint of the tarsi also dilated; the wings fuscous. Abdomen, the four apical segments green, and having a short changeable golden pile.

Hab. Brazil (Tapajos).

8. Euglossa violacea. B.M.

Euglossa violacea, *Blanch. Hist. nat. Ins.* iii. 405 ♀.
Euglossa cærulescens, *St. Farg. Hym.* ii. 11. 3 ♂.

The female of this species is entirely purple, the pubescence on the thorax being black.

Hab. Brazil.

9. Euglossa nigrita. B.M.

Eulema analis, *St. Farg. Hym.* ii. 14. 7 ♂, nec *Westw.*
Eulema nigrita, *St. Farg. Hym.* ii. 14. 6 ♀.

Hab. Cayenne; Brazil.

10. Euglossa Brullei.

Euglossa Brullei, *St. Farg. Hym.* ii. 10. 2.

Hab. Brazil?

11. Euglossa Surinamensis. B.M.

Apis Surinamensis, *Linn. Syst. Nat.* i. 961. 52.
Drury, Illus. Exot. Ins. iii. t. 43. f. 4.
De Geer, iii. t. 43. f. 4.
Fabr. Ent. Syst. ii. 326. 53.
Apis mussitans, *Fabr. Ent. Syst.* ii. 326. 53.
Centris Surinamensis, *Fabr. Syst. Piez.* p. 355. 3.
Schomb. Faun. Flo. Brit. Guiana, p. 592.
Eulema Surinamensis, *St. Farg. Hym.* ii. 13. 4 (*type sp. in Coll. Westw.*).
Euglossa Surinamensis, *Westw. Nat. Lib.* xxxviii. 261. t. 19. f. 1.
Schomb. Faun. Flo. Brit. Guiana, p. 592.

Hab. Brazil; Columbia; British Guiana.

12. Euglossa smaragdina.

Centris smaragdina, *Perty, Del. An. Art.* p. 150. t. 28. f. 13.

Hab. Brazil.

13. Euglossa elegans. B.M.

Eulema elegans, *St. Farg. Hym.* ii. 13. 3 (*type sp. in Coll. Westw.*).

Hab. Cayenne; Brazil.

14. Euglossa Cajennensis. B.M.

Eulema Cajennensis, *St. Farg. Hym.* ii. 14. 5.
Eulema fasciata, *St. Farg. Hym.* ii. 12. 1 ♀ (*type sp. in Coll. Westw.*).

Hab. Cayenne; Honduras; Brazil.

Subfam. 5. SOCIALES, *Latr.*

Genus 61. APATHUS.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Bombus, pt., *Fabr. Syst. Piez.* p. 342 (1804).
Bremus, pt., *Jurine, Hym.* p. 275 (1807).
Psithyrus, *St. Farg. Ann. Soc. Ent. Fr.* (nec *Hubner*) 1832.
Apathus, *Newm. Ent. Mag.* ii. (1834).

1. APATHUS RUPESTRIS. B.M.

Apis rupestris, *Fabr. Ent. Syst.* ii. 320. 26 ♀.
Kirby, Mon. Ap. Angl. ii. 369. 108 ♀.
Apis Albinella, *Kirby, Mon. Ap. Angl.* ii. 361. 104 ♂.
Apis frutetorum, *Panz. Faun. Germ.* 75. 20 ♂.
Fabr. Syst. Piez. 350. 38.
Bremus pomorum, *Panz. Faun. Germ.* 75. 18 ♂.
Apis subinterrupta, *Kirby, Mon. Ap. Angl.* ii. 356. 99 ♂, and *Cab. Mus. Ent. Soc.*
Bombus rupestris, *Fabr. Syst. Piez.* 348. 26.
Latr. Hist. Nat. xiv. 64. 3.
Dahlb. Bomb. Scand. 51. 33.
Psithyrus rupestris, *St. Farg. Hym.* ii. 426. 1.
Drews. & Schiödte, Kröy. Tidsskr. ii. 125. 5.
Curtis, Brit. Ent. x. t. 468.
Nyland. Ap. Boreal. p. 241. 1.
Psithyrus frutetorum, *St. Farg. Hym.* ii. 436. 5 ♂.
Apathus rupestris, *Smith, Zool.* ii. 543. 1; *Cat. Acul. Hym.* 97. 1.

Hab. Britain; France; Germany.

2. APATHUS NEMORUM. B.M.

Apis nemorum, *Fabr. Ent. Syst.* ii. 317. 11, and *Cab. Banks, Mus. Linn. Soc.* ♀.
Bremus æstivalis, *Panz. Faun. Germ.* 89. 16.
Apis vestalis, *Fourc. Ent. Par.* ii. 450. 27.
Kirby, Mon. Ap. Angl. ii. 347. 95. t. 18. f. 3 ♀ (nec f. 4 ♂).
Bombus nemorum, *Fabr. Syst. Piez.* p. 345. 8.
Bombus vestalis, *Latr. Hist. nat. Ins.* xiv. 65. 9.
Dahlb. Bomb. Scand. p. 51. 34.
Illig. Mag. v. 174. 60.
Psithyrus vestalis, *St. Farg. Hym.* ii. 430. 3 ♀.

Psithyrus æstivalis, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 124. 3 ♀.
Nyland. Ap. Boreal. p. 241. 3.
Apathus nemorum, *Smith, Zool.* ii. 544. 4 ♂ ♀.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

3. Apathus campestris. B.M.

Apis campestris, *Panz. Faun. Germ.* 74. 11.
Kirby, Mon. Ap. Angl. ii. 335. 88 ♀ & t. 18. f. 2.
Apis Rossiella, *Kirby, Mon. Ap. Angl.* ii. 331. 85 ♂ & t. 18. f. 1 ♂.
Apis Francisana, *Kirby, Mon. Ap. Angl.* ii. 334. 87 ♂, var.
Apis Lecana, *Kirby, Mon. Ap. Angl.* ii. 333. 86 ♂, var.
Apis subterranea, *Kirby, Mon. Ap. Angl.* ii. 371. 109 ♂, var.
Bombus campestris, *Fabr. Syst. Piez.* p. 344. 7 ♀.
Illig. Mag. v. 173. 78.
Dahlb. Bomb. Scand. 51. 34.
Bombus Francisanus, *Illig. Mag.* v. 165. 14 ♂.
Bombus Rossiellus, *Dahlb. Bomb. Scand.* 40. 15 ♂.
Psithyrus Rossiellus, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 123. 1. t. 2. f. *g* ♂.
Nyland. Ap. Boreal. p. 242. 5.
Psithyrus campestris, *St. Farg. Hym.* ii. 433. 4 ♀.
Drews. & Schiödte, Kröy. Tidsskr. ii. 123. 2.
Nyland. Ap. Boreal. p. 242. 4.
Apathus campestris, *Smith, Zool.* ii. 543. 2 ♂ ♀.
Psithyrus Francisanus, *Drews. & Schiödte, Kröy. Tidsskr.* 125. 4.
Nyland. Ap. Boreal. p. 241. 2 ♂.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

4. Apathus Barbutellus. B.M.

Apis Barbutella, *Kirby, Mon. Ap. Angl.* ii. 343. 93 ♀, t. 18. f. 4 ♂.
Psithyrus quadricolor, *St. Farg. Hym.* ii. 428. 2 ♂.
Apathus Barbutellus, *Smith, Zool.* ii. 543. 3 ♂ ♀.

Hab. Britain; France; Denmark; Sweden; Finland; Lapland.

5. Apathus arenarius. B.M.

Apis arenaria, *Panz. Faun. Germ.* 74. 12 ♀.
Psithyrus rupestris, *St. Farg. Hym.* ii. 427, var.
Psithyrus Pyrenæus, *St. Farg. Hym.* i. 427, var. 2 (*type sp. in Coll. Westw.*).

Hab. France; Germany; Polish Ukraine.

6. Apathus fraternus. B.M.

Male. Length 10 lines.—Black; the face below the insertion of the antennæ densely covered with dark fuscous pubescence; the flagellum very slender, the joints subarcuate; on the vertex the pubescence is mixed with fulvous. Thorax clothed with short fulvo-ochraceous pubescence, on the middle of the disk it is black; the wings fuscous, darkest towards their base; the legs clothed with short dark fuscous pubescence. Abdomen elongate, narrowed towards the apex; the two basal segments clothed with short fulvo-ochraceous, and the apical segments with short black pubescence.

Hab. North America.

7. Apathus citrinus. B.M.

Male. Length 6½ lines.—Black, the face densely clothed with long black pubescence; on the vertex it is obscurely yellow. Thorax thinly clothed above with long lemon-coloured pubescence, having a black band between the wings; the wings fusco-hyaline, slightly clouded at their apical margins; the sides of the thorax have a yellow pubescence, but beneath and also on the legs it is black. Abdomen, the three basal segments clothed with lemon-coloured pubescence, the apical ones with black; beneath black.

Hab. United States.

8. Apathus Brasiliensis.

Female. Length 7 lines.—Black; head subrotundate, the face clothed with black pubescence, that on the vertex mixed with a few yellow hairs. Thorax clothed anteriorly with long yellow pubescence; the disk shining, thinly covered with black hairs; the metathorax, the sides and beneath have also a black pubescence; the wings subhyaline, their nervures ferruginous. Abdomen shining, the base thinly clothed with black pubescence; on the third and fourth segments it is white, but on the apical ones it is black; the apical segment incurved, nearly naked and acute.

Hab. Brazil (Para). (Coll. F. Smith.)

Genus 62. BOMBUS.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Bombus, *Latr. Hist. nat. Ins.* xiv. 63 (1802).
Bremus, *Jurine, Hym.* (1807).

1. Bombus muscorum. B.M.

Apis muscorum, *Linn. Faun. Suec.* 1714, and *Cab. Mus. Linn. Soc.*; *Syst. Nat.* ed. 10. no. 32.
Fourc. Ent. Par. ii. 451. 29.
Apis collium, *Scop. Ent. Carn.* 823.
Apis fasciata, *Scop. Ann. Hist. Nat.* iv. 12. 7.
Apicis vulgo, *Harris, Expos.* 137. 13. t. 40. f. 13 ♀.
Apicis melinus, *Harris, Expos.* 138. 17. t. 40. f. 17 ♂.
Apis agrorum, *Fabr. Ent. Syst.* ii. 321. 29 ♀, var.?
Kirby, Mon. Ap. Angl. ii. 326. 81 ♀, var.
Apis pygmæus, *Fabr. Ent. Syst.* ii. 324. 44 ♂.
Apis floralis, *Kirby, Mon. Ap. Angl.* ii. 321. 76 ♀, t. 17. f. 14 ♂, and *Cab. Mus. Ent. Soc.*
Apis Beckwithella, *Kirby, Mon. Ap. Angl.* ii. 323. 78 ♀, var. β ♂, and *Cab. Mus. Ent. Soc.*
Apis Sowerbiana, *Kirby, Mon. Ap. Angl.* ii. 322. 77 ♂, and *Cab. Mus. Ent. Soc.*
Apis Curtisella, *Kirby, Mon. Ap. Angl.* ii. 324. 79 ♂, and *Cab. Mus. Ent. Soc.*
Apis Francillonella, *Kirby, Mon. Ap. Angl.* ii. 319. 75 ♂, t. 17. f. 13, and *Cab. Mus. Ent. Soc.*
Apis Forsterella, *Kirby, Mon. Ap. Angl.* ii. 325. 80 ♂, and *Cab. Mus. Ent. Soc.*
Bremus agrorum, *Panz. Faun. Germ.* 85. 20.
Bombus agrorum, *Fabr. Syst. Piez.* 348. 30 ♀.
Dahlb, Bomb. Scand. 48. 28 ♂, ♀, ♂.
Drews. & Schiödte, Kröy. Tidsskr. ii. 108. 2.
Nyland. Ap. Boreal. p. 228. 4.
Bombus pygmæus, *Fabr. Syst. Piez.* 258. 54 ♂.
Bombus muscorum, *Smith, Zool.* ii. 545. 2 ♂, ♀, ♂.
L'abeille fauve à ventre jaune et extrémité fauve, *Geoff. Ins. Par.* ii. 419. 42.

Hab. Europe.

2. Bombus senilis. B.M.

Apis senilis, *Fabr. Syst. Ent.* 382. 26, and *Cab. Banks. Mus. Linn. Soc.* var. ♂.
Rossi, Faun. Etrus. ii. 162. 909 ♂.
Apis muscorum, *Fabr. Syst. Ent.* 381. 17 ♀.
Schrank, Ins. Aust. 801.
Rossi, Faun. Etrus. ii. 100. 904.
Christ. Hym. 130. t. 8. f. 3, and 142. t. 11. f. 8 ♂.
Kirby, Mon. Ap. Angl. ii. 317. 74, and *Cab. Mus. Ent. Soc.*
Don. Eng. Ins. xi. 70. t. 382. f. 2.
Apicis impavidus, *Harris, Expos.* 131. 6. t. 38. f. 6 ♀.

Apicis melleus, *Harris, Expos.* 138. 18. t. 11. f. 18.
Bombus muscorum, *Fabr. Syst. Piez.* 349. 32.
Latr. Hist. Nat. xiv. 65. 7.
Dahlb. Bomb. Scand. 47. 27.
Brullé, Expéd. de Morée, iii. 328. 733.
Westw. Nat. Lib. xxxviii. 225. t. 17. f. 1; p. 252. t. 16. f. 3.
Drews. & Schiödte, Kröy. Tidsskr. ii. 107. 1.
Nyland. Act. Soc. Sc. Fenn. 227. 1.
Bombus senilis, *Fabr. Syst. Piez.* 352. 50.
Smith, Zool. ii. 544. 1.
Bremus muscorum, *Jurine, Hym.* 261.
Bombus cognatus, *Steph. Brit. Ent. Mand. Supp.* vii. 17. t. 43. f. 3 ♀.
Bombylius, *Ray, Hist. Ins.* 246. 3.
Bourdon, *Reaum.* vi. *Mem.* i. 32. t. 2. f. 1, 2, 3.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

3. Bombus autumnalis.

Apis autumnalis, *Fabr. Ent. Syst.* ii. 324. 43.
Bombus autumnalis, *Fabr. Syst. Piez.* 352. 47.
Zett. Ins. Lapp. p. 474. 7.

Hab. Germany?; Lapland.

4. Bombus Italicus. B.M.

Apis italicus, *Fabr. Ent. Syst.* ii. 321. 31.
Bombus italicus, *Fabr. Syst. Piez.* p. 349. 31.
Spin. Ins. Lig. p. 130. 3.
Bremus italicus, *Panz. Faun. Germ.* 89. 17.

Hab. Italy.

5. Bombus Smithianus. B.M.

Bombus arcticus, *Dahlb. Bomb. Scand.* p. 50. 32. f. 20 ♀? (nec *Kirby*).
Zett. Ins. Lapp. p. 476. 13.
Nyland. Ap. Boreal. p. 228. 2.
Bombus Smithianus, *White, Proc. Linn. Soc.* 1851; *Ann. & Mag. Nat. Hist.* x. new ser. p. 294.

Hab. Britain (Shetland); Norway; Lapland; Finland.

6. Bombus meridianus. B.M.

Apis meridiana, *Panz. Faun. Germ.* 80. 19 (nec hypnorum, *Linn.*).

Hab. Germany.

7. Bombus hyperboreus.

Bombus hyperboreus, *Dahlb. Bomb. Scand.* p. 42. 19.
Zett. Ins. Lapp. p. 475. 11.
Schönh. Act. Holm. i. p. 57. t. 3. f. 2 ♀.
Nyland. Ap. Boreal. p. 230. 8.

Hab. Lapland.

8. Bombus hypnorum.

Apis hypnorum, *Linn. Faun. Suec.* no. 1715; *Syst. Nat.* i. 960. 47.
Fabr. Ent. Syst. ii. 322. 32.
Bombus hypnorum, *Fabr. Syst. Piez.* p. 349. 33.
Panz. Faun. Germ. 7. 12.
Dahlb. Bomb. Scand. p. 50. 31.
Zett. Ins. Lapp. p. 475. 12.
St. Farg. Hym. i. 465. 10 ♂ (*type sp. in Coll. Westw.*).
Drews. & Schiödte, Kröy. Tidsskr. ii. 110. 6.
Bombus Apricus, *Fabr. Syst. Piez.* p. 348. 29.
Panz. Faun. Germ. 80. 20 (worker).
Zett. Ins. Lapp. p. 475. 12.
St. Farg. Hym. i. 465. 10 ♀ (*type sp. Coll. Westw.*).

Hab. France; Denmark; Sweden; Finland; Lapland.

9. Bombus equestris.

Apis equestris, *Fabr. Ent. Syst.* ii. 320. 23.
Bombus equestris, *Fabr. Syst. Piez.* p. 347. 22.
Illig. Mag. v. 171. 43.
Drews. & Schiödte, Kröy. Tidsskr. ii. 110. 5. t. 2. f. *e.*
Nyland. Ap. Boreal. p. 230. 7.
Apis arctica, *Quenzel, Acerbi's Trav. Lap.* ii. 253. t. 1. f. 7? (1802).

Hab. Denmark.

10. Bombus fragrans. B.M.

Apis fragrans, *Pallas, It.* i. 474. 75.
Kirby, Mon. Ap. Angl. ii. 329. 88 ♂.
Apis pratorum, *Fabr. Ent. Syst.* ii. 322. 34.
Bombus pratorum, *Fabr. Syst. Piez.* p. 349. 36.
Bombus fragrans, *Illig. Mag.* v. 165. 10.
Dahlb. Bomb. Scand. p. 46. 26. f. 16.
St. Farg. Hym. i. 464. 9.
Smith, Zool. ii. 545. 3.
Drews. & Schiödte, Kröy. Tidsskr. ii. 121. 17.
Nyland. Ap. Boreal. p. 229. 6.

Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland; Lapland; Siberia.

11. Bombus zonatus. B.M.

Female. Length 9 lines.—Black; the head has a black pubescence, the anterior portion of the thorax as far as the insertion of the wings clothed with fulvo-ochraceous pubescence, the rest of the thorax and the basal segment of the abdomen clothed with black pubescence; the second, third and fourth segments of the abdomen have a fulvo-ochraceous pubescence, that on the two apical segments is black; the wings fuscous, the legs black.

Hab. Greece (Zanti).

Closely resembling *B. Americanorum*, but the wings are paler, and the abdomen has three segments covered with yellow pubescence; in *B. Americanorum* only two are yellow.

12. Bombus ericetorum.

Apis ericetorum, *Panz. Faun. Germ.* 75. 19 (hypnorum ♂?).
Bombus ericetorum, *Fabr. Syst. Piez.* p. 345. 12.

Hab. Germany.

13. Bombus Latreillellus. B.M.

Apis Latreillella, *Kirby, Mon. Ap. Angl.* ii. 330. 84 ♂.
Apis Tunstallana, *Kirby, Mon. Ap. Angl.* ii. 346. 94 ♀.
Bombus Latreillellus, *Illig. Mag.* v. 165. 11 ♂.
Dahlb. Bomb. Scand. p. 39. 14.
Drews. & Schiödte, Kröy. Tidsskr. ii. 120. 16.
Nyland. Ap. Boreal. p. 234. 18.
Bombus Tunstallanus, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 119. 14 ♀.
Nyland. Ap. Boreal. p. 231. 10.

Hab. Britain; France; Denmark.

14. Bombus sylvarum. B.M.

Apis sylvarum, *Linn. Faun. Suec.* 1713, and *Cab. Mus. Linn. Soc.*; *Syst. Nat.* i. 960. 45.
Scop. Ent. Carn. 822.
Fabr. Syst. Ent. p. 321. 27.
Rossi, Faun. Etrus. ii. 906?
Kirby, Mon. Ap. Angl. ii. 326. 82. t. 17. f. 15 ♀, f. 16 ♂.
Bremus sylvarum, *Panz. Faun. Germ.* 85. 19?
Bombus sylvarum, *Fabr. Syst. Piez.* p. 348. 27.
Latr. Hist. Nat. xiv. 65. 8.
Illig. Mag. v. 164. 9.
Spin. Ins. Lig. p. 131. 6.
Dahlb. Bomb. Scand. p. 44. 24.

Bombus sylvarum, *St. Farg. Hym.* i. 463. 8.
Drews & Schiödte, Kröy. Tidsskr. ii. 109. 4.
Smith, Zool. ii. 546. 4.
Nyland. Ap. Boreal. p. 236. 22.
Bombus veteranus, *Fabr. Syst. Piez.* p. 352. 52.
Huber, Obs. Trans. Linn. Soc. vi. 227. t. 25. f. 13, 18.
Hab. Britain; France; Germany; Denmark; Sweden; Finland.

15. BOMBUS TERRESTRIS. B.M.

Apis terrestris, *Linn. Faun. Suec.* 1709, and *Cab. Mus. Linn. Soc.* ♀.
Scop. Ent. Carn. p. 815 & f. 815 ♀.
Fabr. Syst. Ent. p. 379. 5.
Schrank, Ins. Aust. p. 395. 796.
Rossi, Faun. Etrus. ii. 99. 902, nec var.
Don. Brit. Ins. iii. 41. t. 88. f. 1.
Panz. Faun. Germ. p. 1. 16.
Kirby, Mon. Ap. Angl. ii. 350, var. γ. Aeul.
Apicis audax, *Harris, Expos.* p. 130. t. 38. f. 1.
Bombus terrestris, *Latr. Hist. Nat. Ins.* xiv. 64. 1.
Fabr. Syst. Piez. p. 343. 4.
Dahlb. Bomb. Scand. p. 34. 5. f. 5?
Brullé, Expéd. Sc. de Morée, p. 523. 730?
Drews. & Schiödte, Kröy. Tidsskr. ii. 118. 12?
Westw. Nat. Lib. xxxviii. 243. t. 14. f. 1, 2, 3.
Nyland. Ap. Boreal. p. 232. 13?
Smith, Zool. ii. 547. 10.
Lucas, Expéd. Sc. Algér. iii. 142. 3?
Ray, Hist. Ins. p. 247. 5 ♂, & 248. 15 ♀.
Reaum. Ins. vi. *Mem.* 1st, 2. t. 3. f. 1.
Frisch, Ins. ix. 17. f. 13 ♀.
Sultz. Ins. t. 19. f. 124.
Schæff. Icon. t. 251. f. 7.
Hab. Britain; France; Germany; Italy; Denmark; Sweden; Algeria.

16. BOMBUS COLLINUS. B.M.

Bombus collinus, *Smith, Zool.* ii. 548. 17 ♂.
Hab. Britain.

17. BOMBUS LUCORUM. B.M.

Apis lucorum, *Linn. Faun. Suec.* 1716, and *Cab. Mus. Linn. Soc.* ♂.
Fabr. Syst. Ent. ii. 322. 35.
Schrank, Ins. Aust. p. 808.
Kirby, Mon. Ap. Angl. ii. 336. 89.

Apis hortorum, *Scop. Ent. Carn.* p. 817 ♀.
Fabr. Syst. Ent. ii. 320. 22.
Apis terrestris, *Christ. Hym.* p. 127. t. 7. f. 2 ♀.
Kirby, Mon. Ap. Angl. ii. 350, and *Cab. Mus. Ent. Soc.* (not var. γ.)
Apis cæspitum, *Panz. Faun. Germ.* p. 31. 19 ♂.
Bremus fasciatus, *Panz. Faun. Germ.* p. 90. 17.
Apis virginalis, *Kirby, Mon. Ap. Angl.* ii. 349. 95, and *Cab. Mus. Ent. Soc.* ♂.
Bombus lucorum, *Fabr. Syst. Piez.* p. 350. 37 ♂.
Dahlb. Bomb. Scand. p. 42. 20 ♂.
Smith, Zool. ii. 546. 6 ♂, ♀, ♂.
Bombus virginalis, *Illig. Mag.* v. 167. 20 ♂.
Dahlb. Bomb. Scand. p. 35. 6.
Nyland. Act. Soc. Sc. Fenn. p. 233. 14.
Bombus ericetorum, *Curtis, Brit. Ent.* xii. t. 564.
Bombus terrestris, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 118. 12.
Bombus sporadicus, *Nyland. Ap. Boreal.* 233. 15.

Hab. Britain; France; Germany; Sweden; Austria; Finland; Denmark.

A form of this species received from Portugal has the pubescence on the legs fulvous.

18. Bombus hortorum. B.M.

Apis hortorum, *Linn. Faun. Suec.* 1710, and *Cab. Mus. Linn. Soc.* ♀; *Syst. Nat.* i. 960. 26.
Schrank, Ins. Aust. p. 797.
Rossi, Faun. Etrus. ii. 100. 903?
Apicis fidens, *Harris, Expos.* p. 130. 3. t. 38. f. 3 ♀.
Apis terrestris, *Rossi, Faun. Etrus.* ii. 99. 902 ♀.
Bombus hortorum, *Latr. Hist. Nat.* xiv. 65. 5 ♀.
Illig. Mag. v. 166. 17.
Walck. Ins. Par. ii. 146.
Dahlb. Bomb. Scand. p. 38. 12 ♂, ♀, ♂.
St. Farg. Hym. i. 466. 12.
Brullé, Expéd. Sc. de Morée, iii. 328. 731.
Drews. & Schiödte, Kröy. Tidsskr. ii. 120. 16.
Smith, Zool. ii. 546. 7.
Nyland. Ap. Boreal. p. 231. 11.
Ray, Hist. Ins. p. 248. 11.
Geoffr. Hist. Ins. ii. 418. 25.
Huber, Obs. p. 226. t. 25. f. 10–12.

Hab. Britain; France; Germany; Italy; Austria; Denmark; Sweden; Finland; Lapland; Siberia.

19. Bombus Scrimshiranus. B.M.

Apis Jonella, *Kirby, Mon. Ap. Angl.* ii. 338. 90 ♂, and *Cab. Mus. Ent. Soc.*
Apis Scrimshirana, *Kirby, Mon. Ap. Angl.* ii. 342. 92 ♀, and *Cab. Mus. Ent. Soc.*
Bombus Scrimshiranus, *Illig. Mag.* v. 166. 18.
Dahlb. Bomb. Scand. p. 39. 13 ♀, ♂.
Drews. & Schiödte, Kröy. Tidsskr. ii. 118. 12.
Smith, Zool. ii. 547 ♂, ♀, ♂.
Nyland. Ap. Boreal. p. 232. 12 ♀, ♂.
Bombus Jonellus, *Illig. Mag.* v. 166. 16 ♂.
Dahlb. Bomb. Scand. p. 43. 21 ♂?

Hab. Britain; Denmark; Sweden; Finland; Lapland; Siberia.

20. Bombus subterraneus. B.M.

Apis subterranea, *Linn. Faun. Suec.* no. 1718; *Syst. Nat.* i. 961. 51, and *Cab. Mus. Linn. Soc.*
Fabr. Ent. Syst. ii. 322. 37.
Müller, Prodr. Z. Dan. p. 165. 1928.
Apis Harrisella, *Kirby, Mon. Ap. Angl.* ii. 373. 110. t. 18. f. 7.
Bombus subterraneus, *Fabr. Syst. Piez.* p. 345. 10.
Dahlb. Bomb. Scand. p. 31. 11.
Drews. & Schiödte, Kröy. Tidsskr. ii. 116. 11.
Nyland. Ap. Boreal. p. 239. 27.
Smith, Cat. Hym. Acul. p. 102. 9.
Bombus Harrisellus, *Westw. Nat. Lib.* xxxviii. 256. t. 18. f. 1 ♂.
Smith, Zool. ii. 550. 16.
Bombus soroensis, *St. Farg. Hym.* i. 468. 14 (*type sp. in Coll. Westw.*).
Bombus Burrellanus, *St. Farg. Hym.* i. 462. 6 ♂ (*type sp. in Coll. Westw.*).
Bombus flavo-nigrescens, *Smith, Zool.* iv. 1566.

Hab. Britain; France; Germany; Denmark; Sweden; Lapland.

21. Bombus soroensis. B.M.

Apis soroensis, *Fabr. Ent. Syst.* ii. 318. 12 ♀.
Panz. Faun. Germ. p. 7. 11.
Bombus soroensis, *Fabr. Syst. Piez.* p. 345. 10.
Dahlb. Bomb. Scand. p. 43. 22.
Drews. & Schiödte, Kröy. Tidsskr. ii. 112. 8. t. 2. f. *e* ♂, *f* ♀.
Apis neutra, *Panz. Faun. Germ.* p. 83. 18.
Apis Cullumana, *Kirby, Mon. Ap. Angl.* ii. 359. 102 ♂.
Bombus neutra, *St. Farg. Hym.* i. 469. 15.

Hab. Britain; France; Germany; Denmark; Sweden.

22. Bombus nivalis. B.M.

Bombus nivalis, *Dahlb. Bomb. Scand.* p. 40. 16 ♀.
Zett. Ins. Lapp. p. 474. 7.
Nyland. Ap. Boreal. p. 234. 17.
Apis alpina, *Fabr.* (*Otho*) *Faun. Grœnl.* p. 199. 155?

Hab. Britain (Perthshire and Shetland); Lapland.

23. Bombus Grœnlandicus. B.M.

Bombus Grœnlandicus, *Westerm. MSS.*?

Female. Length 9–10 lines.—Black; the pubescence on the face black, that on the vertex is also black; the face elongate. Thorax, above, anteriorly and posteriorly having a long loose yellow pubescence, between the wings a broad band of black; wings subhyaline, stained with fuscous towards their base; the legs have a black pubescence. Abdomen, the two basal segments covered with long yellow pubescence, the apical ones with black.

Hab. Greenland.

24. Bombus consobrinus.

Bombus consobrinus, *Dahlb. Bomb. Scand.* p. 49. 30 ♀.
Nyland. Ap. Boreal. p. 229. 5.

Hab. Sweden; Finland; Lapland.

25. Bombus cryptarum.

Apis cryptarum, *Fabr. Ent. Syst.* ii. 317. 9.
Bombus cryptarum, *Fabr. Syst. Piez.* p. 344. 5.

Hab. Copenhagen.

26. Bombus mniorum.

Bombus mniorum, *Fabr. Syst. Piez.* p. 350. 40.
Drews. & Schiödte, Kröy. Tidsskr. ii. 108. 3. t. 2. f. *a* ♀, f. *b* ♂.
Nyland. Ap. Boreal. p. 240. 29.

Hab. Denmark.

27. Bombus Altaicus.

Bombus Altaicus, *Eversm. Bull. Mosc.* xix. 436. t. 4. f. 1.

Hab. Russia.

28. Bombus patagiatus.

Bombus patagiatus, *Nyland. Ap. Boreal.* p. 234. 16.

Hab. Siberia.

29. Bombus Ligusticus.

Bombus Ligusticus, *Spin. Ins. Lig.* fasc. 1. p. 29.
St. Farg. Hym. i. 471. 21 (*type sp. in Coll. Westw.*).
Bombus scutellatus, *Jurine, Hym.* t. 12. gen. 37.

Hab. Italy.

30. Bombus pratorum. B.M.

Apis pratorum, *Linn. Faun. Suec.* no. 1711; *Syst. Nat.* i. 960. 43, and *Cab. Mus. Linn. Soc.* ♂.
Schrank, Ins. Aust. no. 798.
Kirby, Mon. Ap. Angl. ii. 360. 103.
Apis collaris, *Scop. Ent. Carn.* no. 818.
Apis Arbustorum, *Fabr. Ent. Syst.* ii. 320. 24 ♂.
Apis subinterrupta, *Kirby, Mon. Ap. Angl.* ii. 356. 99 ♀.
Apis Donovanella, *Kirby, Mon. Ap. Angl.* ii. 357. 100. t. 18. f. 6 ♀ (var.).
Apis Burrellana, *Kirby, Mon. Ap. Angl.* ii. 358. 101 ♂.
Bombus arbustorum, *Fabr. Syst. Piez.* p. 347. 23.
Zett. Ins. Lapp. p. 473. 5.
Bombus subinterruptus, *Latr. Hist. Nat.* xiv. 64. 4.
Illig. Mag. v. 167. 20.
Dahlb. Bomb. Scand. p. 35. 7.
St. Farg. Hym. i. 461. 5 (*type sp. in Coll. Westw.*).
Drews. & Schiödte, Kröy. Tidsskr. ii. 111. 7.
Bombus Burrellanus, *Dahlb. Bomb. Scand.* p. 43. 22 ♂.
Bombus ephippium, *Dahlb. Bomb. Scand.* p. 37. 10 ♀.
Zett. Ins. Lapp. p. 473. 6.
Bombus pratorum, *Illig. Mag.* v. 168. 27.
Dahlb. Bomb. Scand. p. 36. 9 ♂.
Drews. & Schiödte, Kröy. Tidsskr. ii. 111. 7.
Smith, Zool. ii. 548. 11.
Bombus Donovanella, *Westw. Nat. Lib.* xxxviii. 255. t. 17. f. 2 ♂.
Bombus lullianus, *Nyland. Ap. Boreal.* p. 236. 21 ♂.

Hab. Britain; France; Germany; Austria; Denmark; Sweden; Finland; Lapland.

31. Bombus montanus. B.M.

Bombus montanus, *St. Farg. Hym.* i. 463. 7 (*type sp. in Coll. Westw.*).

Hab. France; The Pyrenees; Polish Ukraine.

32. Bombus tricolor.

Bombus tricolor, *Dahlb. Bomb. Scand.* p. 40. 17 (var. nivalis?).
Zett. Ins. Lapp. p. 474. 9.

Hab. Denmark; Lapland.

33. Bombus alpinus.

Apis alpina, *Linn. Faun. Suec.* no. 1719; *Syst. Nat.* i. 961. 55.
Bombus alpinus, *Fabr. Syst. Piez.* p. 343. 2.
Ahrens, Faun. Europ. p. 10. 17.
Zett. Ins. Lapp. p. 471. 2.
Dahlb. Bomb. Scand. p. 32. 2.
Nyland. Ap. Boreal. p. 238. 24.
Bombus rufescens, *St. Farg. Hym.* i. 460. 1 (*type sp. in Coll. Westw.*).

Hab. Sweden; France; Finland; Lapland.

34. Bombus Lapponicus. B.M.

Apis Lapponica, *Fabr. Ent. Syst.* ii. 318. 13.
Quenz. Acerbi's Trav. Lap. ii. 253. t. 1. f. 3.
Bombus Lapponicus, *Fabr. Syst. Piez.* p. 345. 11.
Ahrens, Faun. Europ. p. 10. 18.
Dahlb. Bomb. Scand. p. 41. 18.
Zett. Ins. Lapp. p. 474. 10.
St. Farg. Hym. i. 459. 1 (*type sp. in Coll. Westw.*).
Nyland. Ap. Boreal. p. 235. 20.
Bombus regelationis, *Newm. Ent. Mag.* ii. 327 (nec *Panz.*).
Bombus montanus, *Smith, Zool.* ii. 549. 13 (nec *St. Farg.*).
Bombus monticola, *Smith, Zool.* vii. *App.* p. 59.

Hab. Britain; Lapland; France.

35. Bombus Derhamellus. B.M.

Apis Derhamella, *Kirby, Mon. Ap. Angl.* ii. 363. 105, and *Cab. Mus. Ent. Soc.* ♂.
Apis Raiella, *Kirby, Mon. Ap. Angl.* ii. 367. 107, and *Cab. Mus. Ent. Soc.* ♀.
Bombus Derhamellus, *Dahlb. Bomb. Scand.* p. 44. 23 ♂, ♀, ♂.
Bombus Raiellus, *Illig. Mag.* v. 169. 31.
Dahlb. Bomb. Scand. p. 33. 4.
Drews. & Schiödte, Kröy. Tidsskr. ii. 115. 9.
Smith, Zool. ii. 550. 15.
Nyland. Ap. Boreal. p. 238. 26.
Bombylus minor, *Ray, Hist. Ins.* p. 246. 2.

Hab. Britain; France; Denmark; Sweden; Finland; Lapland.

36. Bombus lapidarius. B.M.

Apis lapidaria, *Linn. Faun. Suec.* 1712, and *Cab. Mus. Linn. Soc.* ♀; *Syst. Nat.* i. 960. 44.

Apis lapidaria, *Scop. Ent. Carn.* 813, and f. 813 ♀, no. 1.
Fabr. Syst. Ent. p. 381. 14.
Schrank. Ins. Aust. p. 799.
Fourc. Ent. Par. ii. 449. 22.
Christ. Hym. p. 126, and t. 7. f. 1 ♀.
Don. Eng. Ins. iii. 97, and t. 108. f. 1 ♀, t. 58. f. 2 ♂.
Kirby, Mon. Ap. Angl. ii. 363. 106 ♂, ♀, ♂.
Apicis pertristis, *Harris, Expos.* p. 137, and t. 40. f. 14 ♂.
Apicis opis, *Harris, Expos.* p. 137. t. 40. f. 12 ♂.
Apis coronata, *Fourc. Ent. Par.* ii. 449. 23 ♂.
Apis arbustorum, *Fabr. Ent. Syst.* ii. 320. 24 ♂.
Bremus regelationis, *Panz. Faun. Germ.* p. 86. 17 ♂.
Bombus lapidarius, *Latr. Hist. Nat. Ins.* xiv. 64. 2 ♀.
Fabr. Syst. Piez. p. 347. 25.
Spin. Ins. Lig. fasc. i. p. 130. 4.
Dahlb. Bomb. Scand. p. 30. 1 ♂, ♀, ♂.
St. Farg. Hym. i. 460. 3.
Brullé, Expéd. Sc. de Morée, iii. p. 528. 729.
Drews. & Schiödte, Kröy. Tidsskr. ii. 116. 11.
Westw. Nat. Lib. xxxviii. 252. t. 16. f. 1, 2.
Smith, Zool. ii. 549. 14.
Nyland. Ap. Boreal. p. 238. 25.
Ray, Hist. Ins. p. 247. no. 7.
Reaum. Ins. vi. 2. 3. t. 1. f. 1–4.
Schäff. Icon. Ins. t. 69. f. 9.
Huber, Obs. Linn. Trans. vi. 223. t. 25. f. 1, 2, 3.
Bombus Lefebvrei, *St. Farg. Hym.* i. 461. 4 (*type sp. in Coll. Westw.*).

Hab. Britain; France; Germany; Austria; Denmark; Sweden; Finland; Lapland.

37. Bombus ruderatus.

Apis ruderata, *Fabr. Ent. Syst.* ii. 317. 10.
Bombus ruderatus, *Fabr. Syst. Piez.* p. 344. 6 ♀, and *Cab. Banks. Mus. Linn. Soc.*
Bombus hortorum, *St. Farg. Hym.* i. 466 (nec *Linn.*) (*type sp. in Coll. Westw.*).

An examination of the authentic specimen proves this insect to be distinct from the "*hortorum*" of Linnæus, with which it has hitherto been confounded; the black band on the abdomen only occupies one segment, the general pubescence of the insect is shorter and more dense than in *B. hortorum*, and the mouth is less produced.

Hab. Madeira.

38. Bombus Antiguensis.

Apis antiguensis, *Fabr. Ent. Syst.* ii. 318. 16.
Bombus antiguensis, *Fabr. Syst. Piez.* p. 346. 15.

Hab. Antigua.

39. Bombus melanurus.

Bombus melanurus, *St. Farg. Hym.* i. 469. 16 ♀ (*type sp. in Coll. Westw.*).

Hab. Syria.

40. Bombus eriophorus.

Bombus eriophorus, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 265.

Hab. The Caucasus.

41. Bombus albocinctus.

Female. Length 10 lines.—Black; the pubescence black. Thorax, the collar having a white band, also the first and third segments of the abdomen clothed with white pubescence.

Hab. Kamtschatka. (In Coll. Linn. Soc. Lond.)

42. Bombus Sitkensis.

Bombus Sitkensis, *Nyland. Ap. Boreal.* p. 235. 19.

Hab. Sitka; Russian North America.

43. Bombus Polaris.

Bombus Polaris, *Curtis, Ross's 2nd Voy. App.* p. lxiii. 7.

Female. Length 10 lines.—Black; clothed with yellow hairs above, with a black band across the thorax, and an indistinct one across the abdomen.

Hab. Arctic Regions.

44. Bombus Kirbiellus. B.M.

Bombus Kirbiellus, *Curtis, Ross's 2nd Voy. App.* p. lxii. 6. pl. A. fig. 2.

Female. Length 10 lines.—Black; anterior and posterior margins of the thorax, and base and apex of the abdomen clothed with yellowish hairs.

Hab. Arctic Regions (Boothia Felix). (Coll. W. W. Saunders. Esq.)

45. Bombus Americanorum. B.M.

Apis Americanorum, *Fabr. Ent. Syst.* ii. 319. 18.
Bombus Americanorum, *Fabr. Syst. Piez.* p. 346. 16.
St. Farg. Hym. i. 472. 22 (*type sp. in Coll. Westw.*).

Hab. North America (St. John's Bluff, East Florida).

46. Bombus Carolinus.

Bombus Carolinus, *Fabr. Syst. Piez.* p. 342. 1.

Hab. North America.

47. Bombus Virginicus. B.M.

Apis Virginica, *Fabr. Ent. Syst.* ii. 318. 15.
Bombus Virginicus, *Fabr. Syst. Piez.* p. 346. 14.
St. Farg. Hym. i. 470. 17 (*type sp. in Coll. Westw.*).

Hab. North America (St. John's Bluff, East Florida).

48. Bombus laboriosus.

Bombus laboriosus, *Fabr. Syst. Piez.* p. 352. 51.

Hab. Carolina.

49. Bombus fervidus. B.M.

Apis fervida, *Fabr. Ent. Syst. Supp.* p. 274. 43.
Bombus fervidus, *Fabr. Syst. Piez.* p. 352. 48.
St. Farg. Hym. i. 470. 8 (*type sp. in Coll. Westw.*).

Hab. North America (Trenton Falls).

50. Bombus arcticus.

Bombus arcticus, *Kirby, Parry's* 1*st Voy.* (1821) *Append.* p. ccxvi, ♂ ♀.

Hab. Arctic America.

51. Bombus ternarius.

Bombus ternarius, *Say, Bost. Journ. Nat. Hist.* i. 414. 3.

Hab. Indiana.

52. Bombus ornatus. B.M.

Female. Length 7 lines.—Black ; the pubescence on the head black, mixed with yellow hairs at the insertion of the antennæ ; the thorax has a rich fulvo-ochraceous pubescence, and has a broad black band between the wings, the sides of the

thorax anteriorly yellow; the legs have a black pubescence, with a few pale hairs at the base of the femora beneath; wings fusco-hyaline. Abdomen, the pubescence on the basal segment yellow, on the three following segments it is fulvous, having a narrow border of yellow, which divides it from the black pubescence which clothes the apex.

The colouring of the male and worker is the same, but less bright, and the pubescence is longer in the male than in the other sexes.

Hab. North America; Hudson's Bay; Arctic America.

53. Bombus vagans. B.M.

Female. Length 7 lines.—Black; the pubescence on the head black, that on the thorax above pale bright yellow; the wings subhyaline, the apical margins have a fuscous cloud, the pubescence on the legs black. Abdomen, the pubescence on the two basal segments yellow, on the following it is black.

Hab. North America.

54. Bombus frigidus. B.M.

Female. Length 7 lines.—Black; the pubescence of the head black, mixed with a few pale hairs at the insertion of the antennæ; the vertex has also some pale yellow pubescence. Thorax clothed with yellow pubescence, having a black band between the wings, the latter fusco-hyaline; the legs have a black pubescence, the fringe on the posterior tibiæ fulvous. Abdomen, the two basal segments clothed with rich yellow pubescence, the third with black, that on the apical segments fulvous.

Male. Resembling the female, but having the face clothed with yellow pubescence.

This species closely resembles the *B. montanus* of St. Fargeau. of which it may be the arctic form.

Hab. Arctic America; Hudson's Bay.

55. Bombus sonorus.

Bombus sonorus, *Say*, *Bost. Journ. Nat. Hist.* i. 413. 1.

Hab. Mexico.

56. Bombus ephippiatus.

Bombus ephippiatus, *Say*, *Bost. Journ. Nat. Hist.* i. 414. 2.

Hab. Mexico.

57. Bombus Californicus. B.M.

Female. Length 10 lines.—Black; the pubescence on the head black, that on the thorax before the wings fulvo-ochraceous, posteriorly and beneath black; the legs black; wings fuscous. Abdomen, the pubescence black, except that on the fourth segment, which is yellow.

Male. Length 5–6 lines.—The pubescence as in the female, differing only in having that on the face yellow.

Hab. California.

58. Bombus rubicundus.

Female. Length 9 lines.—Black; the face clothed with fulvous pubescence, the mouth very slightly produced, head subrotundate; the thorax and abdomen above densely clothed with short rufo-fulvous pubescence; the wings smoky; the legs have a black pubescence.

This species closely resembles *B. Dahlbomii*, but that species has an elongate face clothed with black pubescence.

Hab. Columbia.

59. Bombus robustus. B.M.

Female. Length 10 lines.—Black; the pubescence on the head black, that on the thorax above orange-yellow, having a black band between the wings; the wings fuscous; the legs black. Abdomen, the three basal segments have a yellow pubescence, that on the fourth is black, on the fifth and sixth it is white.

Hab. Columbia.

60. Bombus funebris. B.M.

Female. Length 8 lines.—Black; the pubescence on the head black, that on the disk of the thorax snow-white; the wings fuscous; the pubescence on the legs black, that on the three basal segments of the abdomen black; on the apical segments it is white.

Hab. Quito.

61. Bombus violaceus. B.M.

Bombus violaceus, *St. Farg. Hym.* i. 473. 24 (*type sp. in Coll. Westw.*).

Hab. S. America (Monte Video); Brazil (Para).

62. Bombus Brasiliensis.

Bombus Brasiliensis, *St. Farg. Hym.* i. 470. 19 (*type sp. in Coll. Westw.*).

Hab. Brazil.

63. Bombus Cajennensis. B.M.

Apis Cajennensis, *Fabr. Ent. Syst. Supp.* p. 273. 13–14.
Bombus Cajennensis, *Fabr. Syst. Piez.* p. 345. 13.
Bombus Cayennensis, *St. Farg. Hym.* i. 471. 20 (*type sp. in Coll. Westw.*).
Halid. Linn. Trans. xvii. 320. 16.

Hab. Cayenne; Brazil (Para; Rio Tapajos).

64. Bombus Dahlbomii. B.M.

Bombus Dahlbomii, *Guér. Icon. Règ. Anim. Ins.* p. 459. t. 75. f. 3 ♀.
Bombus nigripes, *Halid. Linn. Trans.* xvii. p. 321. 21.
Bombus grandis, *Westw. Nat. Lib.* xxxviii. 255. t. 17. f. 2.
Bombus Chiliensis, *Spin. Faun. Chil.* vi. 165. 1.

Hab. Chili; Brazil (St. Paul's).

65. Bombus rubriventris.

Bombus rubriventris, *St. Farg. Hym.* i. 472. 23 (*type sp. in Coll. Westw.*).

Hab. Brazil.

66. Bombus rufipes.

Bombus rufipes, *St. Farg. Hym.* i. 473. 25 (*type sp. in Coll. Westw.*).

Hab. Java. (Coll. F. Smith.)

67. Bombus tunicatus. B.M.

Bombus tunicatus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 43. t. 8. f. 7 ♀.

Hab. Northern India; North China (Chusan).

68. Bombus trifasciatus.

Bombus trifasciatus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 43. t. 8. f. 4.

Hab. North China (Chusan).

69. Bombus alienus. B.M.

Worker. Length 5 lines.—Face subelongate, the clypeus smooth and shining, strongly punctured at the sides; the pubescence on the head black; that on the thorax anteriorly, posteriorly and on the sides yellow, on the disk between the wings it is black; the wings subhyaline, the anterior margins of the superior pair slightly fulvous, the nervures and tegulæ ferruginous; the femora black, the tibiæ and tarsi ferruginous. Abdomen, the pubescence on the two basal segments yellow, on the third and fourth black, and on the apical segments fulvous.

Hab. North China. (Coll. R. Fortune, Esq.)

70. Bombus rufo-fasciatus. B.M.

Bombus rufo-fasciatus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 48 ♀.

Hab. Northern India.

71. Bombus orientalis. B.M.

Female. Length 10 lines.—Black; the head and thorax clothed with black pubescence; the legs have a black pubescence; wings dark fuscous; the two basal segments of the abdomen clothed with a rich yellow pubescence, the third with black, and the apical segments with ferruginous pubescence.

Hab. East Indies.

72. Bombus nasutus.

Bombus nasutus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 44.

Hab. North China (Chusan).

73. Bombus breviceps.

Bombus breviceps, *Smith, Trans. Ent. Soc.* ii. new ser. p. 44.

Hab. North China.

74. Bombus hæmorrhoidalis. B.M.

Bombus hæmorrhoidalis, *Smith, Trans. Ent. Soc.* ii. new ser. p. 43.

Hab. Northern India; North China (Chusan).

75. Bombus funerarius. B.M.

Bombus funerarius, *Smith, Trans. Ent. Soc.* ii. new ser. p. 47. t. 8. f. 6 ♀.

Hab. Northern India.

76. Bombus flavescens.

Bombus flavescens, *Smith, Trans. Ent. Soc.* ii. new ser. p. 45 ♂.

Hab. North China (Chusan).

77. Bombus formosus. B.M.

Female. Length 9 lines.—Black; the pubescence on the head and thorax above black, on the sides of the metathorax and beneath the wings it is yellow; the legs black; wings smoky; the basal segment of the abdomen and a broad angular patch on the two following segments, of bright yellow pubescence; that on the second and third segments laterally, is bright ferruginous; the three apical segments covered with black pubescence.

Hab. India.

78. Bombus eximius. B.M.

Bombus eximius, *Smith, Trans. Ent. Soc.* ii. 47. new ser. t. 8. f. 5 ♀.

This species resembles the *B. rufipes* of St. Fargeau; but the type-specimen described by that author is in the collection of J. O. Westwood, Esq., and it differs from the present species in having dark smoky wings, with only the intermediate tarsi, and posterior tibiæ and tarsi ferruginous; in *eximius* all the tibiæ and tarsi are pale, the wings yellow, and the nervures ferruginous.

Hab. Silhet.

79. Bombus similis.

Bombus similis, *Smith, Trans. Ent. Soc.* ii. new ser. p. 48.

Hab. Northern India.

Genus 63. MELIPONA.

Apis, pt., *Fabr. Ent. Syst. Supp.* p. 273 (1798).
Melipona, *Latr. Gen. Cr. et Ins.* iv. 182 (1806–9).
Trigona, pt., *Jurine, Hym.* (1807).

1. Melipona favosa. B.M.

Apis favosa, *Fabr. Ent. Syst. Supp.* p. 275. 82.
Latr. Mem. Ann. Mus. v. 175. t. 13. f. 5; iv. t. 69. f. 6, 8 (*type sp. in Coll. Westw.*).
Melipona favosa, *Latr. Gen. Cr. et Ins.* iv. 182, and *Voy. Humb. & Bonp.* p. 289. 1. t. 20. f. 1 ♂.
Klug, Illig. Mag. vi. 226.

Melipona favosa, *St. Farg. Hym.* i. 419. 6.
Trigona favosa, *Jurine, Hym.* p. 246.

Hab. Cayenne; Venezuela.

2. MELIPONA FASCIATA.

Melipona fasciata, *Latr. Voy. Humb. & Bonp.* p. 291.

Hab. Brazil.

3. MELIPONA INTERRUPTA.

Melipona interrupta, *Latr. Voy. Humb. & Bonp.* p. 291. 4. t. 20. f. 3 ♂.

Hab. Brazil; Cayenne.

4. MELIPONA POSTICA.

Melipona postica, *Latr. Voy. Humb. & Bonp.* p. 292. 5. t. 20. f. 4 ♂.

Hab. Brazil.

5. MELIPONA SCUTELLARIS.

Melipona scutellaris, *Latr. Voy. Humb. & Bonp.* p. 290. 2. t. 20. f. 2 ♂.

Hab. Brazil.

6. MELIPONA FULIGINOSA.

Melipona fuliginosa, *St. Farg. Hym.* i. 423. 13.

Hab. Cayenne.

7. MELIPONA MUTATA. B.M.

Melipona mutata, *St. Farg. Hym.* i. 419. 5 (*type sp. in Coll. Westw.*).

Hab. Cayenne.

8. MELIPONA BICOLOR. B.M.

Melipona bicolor, *St. Farg. Hym.* i. 423. 11 (*type sp. in Coll. Westw.*).

Hab. Brazil (Para).

9. MELIPONA ANTHIDIOIDES. B.M.

Melipona anthidioides, *St. Farg. Hym.* i. 417. 3 (*type sp. in Coll. Westw.*).

Hab. Brazil.

10. Melipona fulva.
Melipona fulva, *St. Farg. Hym.* i. 421. 9.
Hab. Brazil.

11. Melipona Sant. Hilarii.
Melipona Sant. Hilarii, *St. Farg. Hym.* i. 420. 7.
Hab. Brazil.

12. Melipona mixta.
Melipona mixta, *St. Farg. Hym.* i. 422. 10.
Hab. Brazil.

13. Melipona marginata.
Melipona marginata, *St. Farg. Hym.* i. 424. 13.
Hab. Brazil. (Coll. F. Smith.)

14. Melipona nigra.
Melipona nigra, *St. Farg. Hym.* i. 423. 12.
Hab. Brazil.

15. Melipona quadrifasciata.
Melipona quadrifasciata, *St. Farg. Hym.* i. 416. 1.
Hab. Brazil.

16. Melipona quinquefasciata.
Melipona quinquefasciata, *St. Farg. Hym.* i. 418. 4.
Hab. Brazil.

17. Melipona rufiventris.
Melipona rufiventris, *St. Farg. Hym.* i. 421. 8.
Hab. Brazil.

18. Melipona vicina.
Melipona vicina, *St. Farg. Hym.* i. 417. 2.
Hab. Brazil.

19. Melipona grandis.
Melipona grandis, *Guér. Icon. Règ. Anim. Ins.* p. 468.
Hab. Bolivia.

20. Melipona testacea.

Melipona testacea, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 265.

Hab. Brazil.

21. Melipona fulvipes. B.M.

Melipona fulvipes, *Guér. Icon. Règ. Anim. Ins.* p. 462. t. 75. f. 6, 6½.

Hab. Cuba.

22. Melipona compressipes.

Apis compressipes, *Fabr. Syst. Piez.* p. 370. 2.
Melipona compressipes, *Schomb. Faun. Flo. Brit. Guiana*, iii. 592.

Hab. Guiana.

23. Melipona lateralis.

Melipona lateralis, *Schomb. Faun. Flo. Brit. Guiana*, iii. 592.

Hab. Guiana.

24. Melipona pallens.

Melipona pallens, *Schomb. Faun. Flo. Brit. Guiana*, iii. 592.

Hab. Guiana.

25. Melipona fasciculata. B.M.

Worker. Length 4½ lines.—Black; the vertex of the head, the thorax and legs have a hoary pubescence; head, the face has a narrow line along the inner orbits of the eyes, a line down the centre of the clypeus, and the labrum, yellow; mandibles ferruginous; the antennæ reddish-yellow in front, above fuscous, the two apical joints entirely reddish-yellow. The thorax has anteriorly on each side before the insertion of the wings a tuft of red pubescence; wings subhyaline, the superior pair having a yellow stain, the tegulæ and nervures pale rufo-testaceous; the legs rufo-testaceous, the tarsi beneath clothed with fulvous pubescence; the apical margins of the segments of the abdomen have a narrow yellow line; the pubescence at the base, apex and beneath hoary, that at the apex intermixed with black hairs.

Hab. Para.

26. Melipona flavipennis.

Male. Length 5½ lines.—Black, the clypeus, face anteriorly,

labrum and mandibles rufo-testaceous; the flagellum ferruginous beneath; the face is smooth and shining, and has a tuft of sooty-black pubescence above the insertion of the antennæ. Thorax nearly naked on the disk, smooth and shining, having anteriorly at the sides and along the margin of the scutellum a dense fringe of black pubescence; the pubescence on the legs black, except that on the tarsi beneath, which is fulvous; the posterior tarsi beneath, the apical joint of all the tarsi, and the apex of the posterior tibiæ within, ferruginous; the wings bright yellow, palest towards their apical margins, the nervures and tegulæ rufo-testaceous. Abdomen smooth and shining, the apical margins of the segments having a thick fringe of sooty-black pubescence.

Hab. Brazil (Para). (Coll. F. Smith.)

Genus 64. TRIGONA.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Trigona, pt., *Jurine, Hym.* (1807).
Melipona, *Illig. Mag.* v. (1805).

1. Trigona amalthea. B.M.

Apis amalthea, *Fabr. Syst. Piez.* p. 371. 8.
Oliv. Ency. Méth. iv. 68.
Latr. Ann. Mus. Hist. Nat. v. 175. 10. t. 13. f. 13 (*type sp. in Coll. Westw.*).
Trigona amalthea, *Gen. Crust. et Ins.* iv. 183.
Jurine, Hym. p. 246.
Melipona amalthea, *St. Farg. Hym.* i. 425. 16.

Hab. Brazil.

2. Trigona pallida. B.M.

Apis pallida, *Latr. Ann. Mus. Hist. Nat.* v. 177. t. 13. f. 14.
Trigona pallida, *Latr. Ann. Mus. Hist. Nat.* 177. 12. t. 13. f. 14; *Gen. Crust. et Ins.* iv. 183; *Voy. Humb. & Bonp.* i. 294. 2. t. 20. f. 6 ♂ (*type sp. in Coll. Westw.*).
Melipona pallida, *St. Farg. Hym.* i. 432. 30.
Schomb. Faun. Flo. Brit. Guiana, iii. 592.

Hab. Cayenne; Brazil.

3. Trigona compressa.

Trigona compressa, *Latr. Voy. Humb. & Bonp.* i. 294. 4. t. 20. f. 7 ♂.

Hab. Brazil.

4. Trigona ruficrus. B.M.

Apis ruficrus, *Latr. Ann. Mus. Hist. Nat.* v. p. 176.
Trigona ruficrus, *Latr. Ann. Mus. Hist. Nat.* v. 176. 11; *Gen. Crust. et Ins.* iv. p. 183; *Voy. Humb. & Bonp.* i. 293. 1. t. 20. f. 5 ♂.
Jurine, Hym. p. 246.
Melipona ruficrus, *St. Farg. Hym.* i. 426. 17 (*type sp. in Coll. Westw.*).

Hab. Brazil.

5. Trigona angustula.

Centris pediculana, *Fabr. Syst. Piez.* p. 361. 36?
Melipona angustula, *Illig. Mag.* v. 158 (1806).
Latr. Voy. Humb. & Bonp. i. 295. 5.

Hab. Brazil.

6. Trigona bipunctata.

Melipona bipunctata, *St. Farg. Hym.* i. 427. 20.

Hab. Brazil.

7. Trigona bipartita.

Melipona bipartita, *St. Farg. Hym.* i. 432. 31.

Hab. Brazil.

8. Trigona elongata. B.M.

Melipona elongata, *St. Farg. Hym.* i. 433. 33.

Hab. Brazil.

9. Trigona hyalinata.

Melipona hyalinata, *St. Farg. Hym.* i. 428. 21.

Hab. Brazil.

10. Trigona Iris.

Melipona Iris, *St. Farg. Hym.* ii. 431. 28 (*type sp. in Coll. Westw.*).

Hab. Brazil.

11. Trigona longula.

Melipona longula, *St. Farg. Hym.* i. 434. 34.

Hab. Brazil.

12. Trigona lineata. B.M.

Melipona lineata, *St. Farg. Hym.* i. 430. 26.

Hab. Brazil.

13. Trigona quadrangula.

Melipona quadrangula, *St. Farg. Hym.* i. 433. 35 (*type sp. in Coll. Westw.*).

Hab. Brazil.

14. Trigona quadripunctata.

Melipona quadripunctata, *St. Farg. Hym.* i. 430. 27.

Hab. Brazil.

15. Trigona varia.

Melipona varia, *St. Farg. Hym.* i. 433. 32.

Hab. Brazil.

16. Trigona punctata. B.M.

Worker. Length 2 lines.—Black; head and thorax coarsely punctured, the scape in front, the apical joints of the antennæ and the mandibles ferruginous; the face densely clothed with short golden-yellow pubescence; a line passing over the tegulæ and uniting with a spot on each side of the scutellum, at its base, and the posterior margin of the scutellum, bright yellow; the base of the tibiæ yellow; the legs rufo-testaceous; the coxæ, trochanters and tarsi ferruginous; the wings hyaline at their base, fuscous towards their apex. Abdomen smooth and shining, the apical segments covered with golden-yellow pubescence.

Hab. Brazil (Para).

17. Trigona capitata. B.M.

Worker. Length 3 lines.—Black; the head broad, flattened and wider than the thorax; the flagellum obscurely ferruginous, the base of the scape ferruginous. Thorax, a yellow line along the margin of the tegulæ; the wings testaceous, the nervures ferruginous; the legs dark rufo-testaceous, the posterior tibiæ broadly dilated. Abdomen, the margins of the segments membranaceous, the apical segment covered with cinereous pubescence.

Hab. Brazil.

18. Trigona luteipes. B.M.

Worker. Length 2½ lines.—Pale testaceous; the face having on each side a large elongate ovate spot, extending from the stemmata to the base of the mandibles; the scape pale testaceous, the flagellum fuscous; the vertex and disk of the thorax have a scattered black pubescence; the wings fuscous; legs yellow, the apex of the basal joint of the posterior tarsi fuscous; the apex of the abdomen fuscous.

Hab. Brazil.

19. Trigona Ghiliani.

Trigona Ghiliani, *Spin. Mem. Accad. Torino*, xiii. 92. 75 (1851).

Hab. Para.

20. Trigona peltata.

Trigona peltata, *Spin. Mem. Accad. Torino*, xiii. 93. 77.

Hab. Para.

21. Trigona lurida. B.M.

Trigona testacea, *Spin. Mem. Accad. Torino*, xiii. 93. 76 (1851), (nec *Klug*).

Hab. Para.

22. Trigona stigma.

Worker. Length 3 lines.—Jet-black; head wider than the thorax, the face anteriorly having a silvery pile; the vertex, thorax and legs covered with rigid black pubescence; wings hyaline, iridescent, nervures fuscous, the stigma yellow. Abdomen elongate, narrow, smooth and shining.

Hab. Brazil (Amazons).

23. Trigona femorata.

Worker. Length 3½ lines.—Head and thorax black; head wider than the thorax, the clypeus coarsely punctured, the scape ferruginous in front towards the base; the flagellum fulvous in front. Thorax, a pale line passes over the tegulæ, uniting with a pale triangular spot on each side at the base of the scutellum; wings subhyaline, nervures and tegulæ rufo-testaceous; the thorax at the sides and beneath obscurely testaceous and covered with short cinereous pubescence; the femora and abdomen beneath pale rufo-testaceous; abdomen above fuscous, pale testa-

ceous at the base; the posterior tibiæ broadly dilated and having a testaceous stain within; the claws ferruginous.

Hab. Brazil (Amazons).

24. Trigona dorsalis. B.M.

Worker. Length 2 lines.—Head black; the clypeus, a triangular spot above, the face on each side, the scape in front, and the mandibles, yellow; the flagellum testaceous in front. Thorax reddish-yellow, the disk black, encircled with yellow; a dark line beneath the wings and the centre of the metathorax black; legs of a yellow-red, the dilatation of the posterior tibiæ black; wings testaceous. Abdomen subelongate, of reddish-yellow or pale ferruginous.

Hab. Brazil (Para).

25. Trigona dimidiata.

Worker. Length 4½ lines.—Jet-black, the face anteriorly having a short silvery pile; the vertex, disk of the thorax and legs clothed with rigid black pubescence, that on the tarsi beneath reddish-brown; the metathorax smooth and shining, pubescent at the sides; the basal half of the wings dark brown, the apical half milky-white. Abdomen elongate, smooth and shining.

Hab. Brazil (Para). (Coll. F. Smith.)

26. Trigona longipes. B.M.

Worker. Length 2 lines.—Black; the inner orbits of the eyes, the clypeus and a minute triangular spot above it, the labrum and mandibles, yellow, the base of the latter and the anterior margin of the clypeus fuscous; the scape pale rufo-testaceous, having a fuscous spot at the apex above; the flagellum testaceous beneath. Thorax, the collar, and a narrow line passing over the tegulæ, uniting with a spot on each side at the base of the scutellum, yellow; the scutellum, tegulæ and nervures of the wings pale rufo-testaceous; the wings fusco-hyaline, darkest towards their apex; legs rufo-testaceous, a line on the posterior femora beneath, the apex of the intermediate tibiæ, and the basal joint of the tarsi black; the posterior tibiæ elongate, broadly dilated at their apex, somewhat battledore-shaped, the dilatation black. Abdomen testaceous, fuscous towards the apex.

Hab. Brazil (Para).

27. Trigona zonata.

Worker. Length 3 lines.—Head and thorax black; a broad

line on each side of the face touching the eyes, and a minute spot between the antennæ yellow, the labrum and mandibles ferruginous; the flagellum fulvous beneath; wings subhyaline, having a fulvous tint towards the base, the nervures testaceous, the stigma yellow; the legs dark rufo-testaceous. Abdomen ferruginous, the margins of the segments having a black band.

Hab. Columbia.

28. Trigona basalis. B.M.

Worker. Length 3 lines.—The head, thorax, legs, antennæ and basal segment of the abdomen black, the rest of the abdomen ferruginous; the flagellum ferruginous in front, as well as the extreme base of the scape and mandibles, a perpendicular line on the clypeus, and an angular spot on the sides of the face, the tarsi and posterior tibiæ testaceous; sometimes the entire legs rufo-testaceous; the wings hyaline and iridescent, the nervures pale testaceous.

Hab. Brazil; Columbia.

29. Trigona D'Orbignyi.

Trigona D'Orbignyi, *Guér. Icon. Règ. Anim. Ins.* p. 463.

Hab. Bolivia.

30. Trigona argentata. B.M.

Melipona argentata, *St. Farg. Hym.* i. 428. 22 (*type sp. in Coll. Westw.*).

Hab. S. America.

31. Trigona sexpunctata.

Melipona sexpunctata, *St. Farg. Hym.* i. 431. 29.

Hab. ——?

32. Trigona scutellata. B.M.

Melipona scutellata, *St. Farg. Hym.* i. 426. 17.

Hab. South America.

33. Trigona minuta.

Melipona minuta, *St. Farg. Hym.* i. 427. 19.

Hab. ——?

34. Trigona ferruginea. B.M.

Melipona ferruginea, *St. Farg. Hym.* i. 428. 23.

Hab. Para.

35. Trigona Mexicana.

Trigona Mexicana, *Guér. Icon. Règ. Anim. Ins.* p. 464.

Hab. Mexico.

36. Trigona ligata.

Trigona ligata, *Say, Bost. Journ. Nat. Hist.* i. 415. 2.

Hab. Mexico.

37. Trigona fulviventris.

Trigona fulviventris, *Guér. Icon. Règ. Anim. Ins*, p. 464.

Hab. Mexico.

38. Trigona bilineata.

Trigona bilineata, *Say, Bost. Journ. Nat. Hist.* i. 414. 1.

Hab. Mexico.

39. Trigona fuscata. B.M.

Melipona fuscata, *St. Farg. Hym.* i. 424. 14 (*type sp. in Coll. Westw.*).

Hab. Peru.

40. Trigona vidua.

Melipona vidua, *St. Farg. Hym.* i. 429. 24.

Hab. India; Isle of Timor.

41. Trigona testacea. B.M.

Trigona testacea, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), t. 7. f. 4.

Hab. ——?

42. Trigona iridipennis. B.M.

Worker. Length 1½ line.—Black; the face clothed with short silvery pubescence; the labrum, mandibles and antennæ pale testaceous. The margins of the thorax and scutellum fringed with fuscous pubescence; the apical joints of the tarsi testaceous, the sides of the metathorax having a silvery pubes-

cence; the wings subhyaline, splendidly iridescent. Abdomen, the base testaceous, very smooth and shining, the extreme apex pale testaceous; beneath pale testaceous, and having a short silvery pubescence.

Hab. Ceylon.

43. Trigona nebulata. B.M.

Worker. Length 2½ lines.—Black; the clypeus, a triangular spot above it, the anterior angles of the face, the scape in front, the labrum and mandibles yellow. Thorax, a narrow yellow line passing from the collar on each side to the lateral angles of the scutellum; the coxæ and trochanters yellow, the apical joints of the tarsi ferruginous; the pubescence of the legs black; the wings fusco-hyaline, and having a dark fuscous cloud beyond the stigma. Abdomen, the two basal segments red, their apical margins having a narrow black transverse line, the third and following segments black.

Hab. Western Africa.

44. Trigona carbonaria. B.M.

Worker. Length 1¾ line.—Jet-black; the face covered with a short hoary pubescence, the base of the antennæ and tips of the mandibles pale rufo-testaceous. The thorax shining, the scutellum fringed with pale pubescence, the collar and thorax anteriorly covered with pale pubescence; the sides of the metathorax covered with short white pubescence, naked and very smooth and shining; the wings hyaline, the nervures black; the legs obscurely testaceous. Abdomen naked and glossy black.

Hab. Australia.

Genus 65. APIS.

Apis, Auctorum.

1. Apis mellifica. B.M.

Apis mellifica, *Linn. Faun. Suec.* 1697.
Scop. Ent. Carn. p. 811.
Fabr. Syst. Ent. p. 383. 30.
Sulz. Ins. t. 19. f. 123.
Harris, Expos. Eng. Ins. t. 39. f. 9, 10.
Schrank, Ins. Aust. p. 813.
Rossi, Faun. Etrus. ii. 103. 912.
Christ. Hym. 73. t. 1. f. 1 ♂, t. 2. f. 5 ♀, t. 3. f. 1 ♂.
Don. Brit. Ins. xiv. 63. t. 492.

Apis mellifica, *Kirby, Mon. Ap. Angl.* ii. 312. 73. t. 17. f. 10, 11, 12.
Panz. Faun. Germ. 85. 16 ♂, t. 17 ♀, t. 18 ♂.
Latr. Hist. Nat. xiv. 66. 1; *Ann. Mus. Hist. Nat.* v. 167. t. 13. f. 1, 2, 3; *Voy. Humb. & Bonp.* i. 287. 1. t. 19. 1 ♂, 2 ♀, 3 ♂.
Spin. Ins. Lig. i. 35. 15.
Jurine, Hym. p. 244. t. 12. gen. 35 ♀.
Curtis, Brit. Ent. xvi. t. 769 ♂, ♀, ♂.
Brullé, Expéd. Sc. de Morée, iii. 327. 728.
St. Farg. Hym. i. 401. 1.
Lucas, Explo. Sc. Algér. iii. 141. 1.
Nyland. Ap. Boreal. p. 226. 1.
Spin. Faun. Chili. vi. 161. 1.
Apis cerifera, *Scop. Ann. Hist. Nat.* iv. 16. 16.
Apis gregaria, *Geoffr. Ins.* ii. 407. 1.
Apis domestica, *Ray, Hist. Ins.* p. 240.
Reaum. Ins. v. t. 22. f. 1 ♂, f. 2 ♂, f. 4 ♀, t. 25. f. 1 ♂, f. 10 ♂, f. 16, 17 ♀.
Swamm. Bibl. Nat. t. 17. f. 1, 2 ♂, f. 3 ♀, f. 4 ♂.
Hab. Britain; France; Italy; Albania; Africa; Sandwich Islands; S. America; Jamaica; New Holland.

2. Apis Ligustica.

Apis Ligustica, *Spin. Ins. Lig.* i. fasc. 1. p. 35. 15.
Latr. Ann. Mus. Hist. Nat. v. 172. 7. t. 13. f. 10; *Gen. Crust. et Ins.* iv. 182.
Voy. Humb. & Bonp. i. 287. t. 19. f. 4 ♂, 5 ♀, 6 ♂.
St. Farg. Hym. i. 402. 3.

Hab. Italy; France.

3. Apis socialis. B.M.

Apis socialis, *Latr. Voy. Humb. & Bonp.* i. 288. 8. t. 19. f. 9 ♂.
St. Farg. Hym. i. 404. 8 (*type sp. in Coll. Westw.*).

Hab. India (Bengal); Java; Malabar.

4. Apis Adansonii. B.M.

Apis Adansonii, *Latr. Ann. Mus. Hist. Nat.* v. 172. 6; *Voy. Humb. & Bonp.* i. 288. 7.
Guér. Icon. Règ. Anim. Ins. p. 459. t. 75. f. 4.

Hab. Senegal.

5. Apis dorsata. B.M.

Apis dorsata, *Fabr. Ent. Syst.* ii. 328. 64; *Syst. Piez.* p. 370. 7.
St. Farg. Hym. i. 405. 9.

Apis nigripennis, *Latr. Ann. Mus. Hist. Nat.* v. 170. 4. t. 13. f. 7. (*type sp. in Coll. Westw.*).
Apis bicolor, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin*, 1807, p. 264. t. 7. f. 3.

Hab. India.

6. Apis Delessertii.

Apis Delessertii, *Guér. Icon. Règ. Anim. Ins.* p. 461.

Hab. India (Pondicherry).

7. Apis Indica. B.M.

Apis Indica, *Fabr. Ent. Syst. Supp.* p. 274. 59; *Syst. Piez.* p. 370. 4.
Latr. Ann. Mus. Hist. Nat. iv. 390. 1. t. 69. f. 1, 2, 3; v. 169. 3. t. 13. f. 5; *Voy. Humb. & Bonp.* i. 287. 4. t. 19. f. 10 ♂. *St. Farg. Hym.* i. 403. 5 (*type sp. in Coll. Westw.*).

Hab. India.

8. Apis Perrottetii. B.M.

Apis Perrottetii, *Guér. Icon. Règ. Anim. Ins.* p. 461.

Hab. India.

9. Apis Peronii. B.M.

Apis Peronii, *Latr. Ann. Mus. Hist. Nat.* v. 173. 8. t. 13. f. 11; *Voy. Humb. & Bonp.* i. 289. 9. t. 19. f. 12 ♂. *St. Farg. Hym.* i. 405. 10.

Hab. India; Isle of Timor.

10. Apis lobata.

Male. Length 4½ lines.—Black; the head, thorax and basal segment densely clothed with cinereous pubescence; wings hyaline, iridescent, the nervures testaceous; legs rufo-testaceous, the posterior tarsi having an elongate lobe produced at the base beneath; the joints densely pubescent beneath.

Hab. India.

11. Apis fasciata. B.M.

Apis fasciata, *Latr. Ann. Mus. Hist. Nat.* v. 171. 5. t. 13. f. 9; *Voy. Humb. & Bonp.* i. 288. 6. t. 19. f. 7 ♂. *St. Farg. Hym.* i. 406. 11.

Hab. Egypt.

12. Apis unicolor.

Apis unicolor, *Latr. Ann. Mus. Hist. Nat.* v. 168. 2. t. 13. f. 4; *Voy. Humb. & Bonp.* i. 287. 3. t. 19. f. 8 ♂.
St. Farg. Hym. i. 403. 4.

Hab. Isle of Bourbon; Madagascar.

13. Apis nigritarum.

Apis nigritarum, *St. Farg. Hym.* i. 406. 12.

Hab. Congo.

14. Apis scutellata. B.M.

Apis scutellata, *St. Farg. Hym.* i. 404. 7.

Hab. Africa.

15. Apis Caffra.

Apis Caffra, *St. Farg. Hym.* i. 402. 2.

Hab. Africa.

APPENDIX.

20. Colletes hylæiformis. Page 1.

Colletes hylæiformis, *Eversm. Bull. Mosc.* xxv. 45. 1 (1852).

Hab. Russia.

21. Colletes floralis.

Colletes floralis, *Eversm. Bull. Mosc.* xxv. 46. 4 (1852).

Hab. Russia.

22. Colletes juvencula.

Colletes juvencula, *Eversm. Bull. Mosc.* xxv. 46. 5 (1852).

Hab. Russia.

23. Colletes Chilensis.

Colletes Chilensis, *Spin. Faun. Chili.* vi. 220. 1.

Hab. Chili.

24. Colletes nigroventris.

Colletes nigroventris, *Spin. Faun. Chili.* vi. 221. 2.

Hab. Chili.

25. Colletes tetra.

Colletes tetra, *Spin. Faun. Chili.* vi. 221. 3.

Hab. Chili.

26. Colletes semi-cyanea.

Colletes semi-cyanea, *Spin. Faun. Chili.* vi. 221. 4.

Hab. Chili.

27. Colletes albopilosa.

Colletes albopilosa, *Spin. Faun. Chili.* vi. 222. 5.

Hab. Chili.

28. Colletes cognata.

Colletes cognata, *Spin. Faun. Chili.* vi. 223. 7.

Hab. Chili.

29. Colletes fulvipes.

Colletes fulvipes, *Spin. Faun. Chili.* vi. 225. 11.

Hab. Chili.

30. Colletes semi-nitida.

Colletes semi-nitida, *Spin. Faun. Chili.* vi. 225. 12.

Hab. Chili.

31. Colletes atripes.

Colletes dimidiata, *Spin. Faun. Chili.* vi. 225. 10 (nec *Brullé, Hist. Nat. Il. Canar.*).

Hab. Chili.

Colletes fodiens.

Melitta fodiens, *Kirby, Mon. Ap. Angl.* ii. 34. 2.
Colletes fodiens, *Eversm. Bull. Mosc.* xxv. 46. 2 (1852).

Hab. Russia.

Colletes succincta.

Apis succincta, *Linn. Syst. Nat.* i. 955. 18.
Colletes succincta, *Eversm. Bull. Mosc.* xxv. 46. 3 (1852).

Hab. Russia.

COLLETES MARGINATA.

Colletes occidentalis, *Halid. Linn. Trans.* (1837) xvii. 322?
Colletes marginata, *Spin. Faun. Chili.* vi. 223. 6.

Hab. Chili.

COLLETES HIRTA.

Colletes hirta, *St. Farg. Hym.* ii. 296.
Spin. Faun. Chili. vi. 224. 8.

Hab. Chili.

COLLETES CYANESCENS.

Andrena cyanescens, *Halid. Trans. Linn. Soc.* (1837) xvii. 322.
Colletes cyaniventris, *Spin. Faun. Chili.* vi. 224. 9.

Hab. Chili.

Genus PASIPHAË.

Pasiphaë, *Spin. Faun. Chili.* vi. 226.

The ocelli placed in a triangle on the vertex; the antennæ filiform; the superior wings with one marginal and two submarginal cells; the marginal cell elongate and acute at the apex; the second submarginal cell obliquely quadrate, receiving both the recurrent nervures. The maxillary palpi 6-jointed; the labial palpi 4-jointed, the basal joint longer than the three following, much thicker, broadest at the base; the labrum obtuse at the apex, which is emarginate.

1. PASIPHAË CÆRULESCENS.

Pasiphaë cærulescens, *Spin. Faun. Chili.* vi. 228. 1. t. 1. f. 4.

Hab. Chili.

2. PASIPHAË FLAVICORNIS.

Pasiphaë flavicornis, *Spin. Faun. Chili.* vi. 228. 2.

Hab. Chili.

3. PASIPHAË RUFIVENTRIS.

Pasiphaë rufiventris, *Spin. Faun. Chili.* vi. 229. 3.

Hab. Chili.

4. PASIPHAË TRISTIS.

Pasiphaë tristis, *Spin. Faun. Chili.* vi. 230. 4.

Hab. Chili.

Genus CAUPOLICANA.

Caupolicana, *Spin. Faun. Chili.* vi. 212.

The superior wings with one marginal and three submarginal cells. The maxillary palpi 6-jointed, the labial palpi 4-jointed; the labium transverse at the apex, produced laterally into elongate acute points, the margins of the apex ciliated; the paraglossæ as long as the palpi.

This genus is closely allied to *Lamprocolletes* of this Catalogue.

1. CAUPOLICANA GAYI.

Caupolicana Gayi, *Spin. Faun. Chili.* vi. 215. 1. t. 1. f. 2 ♀.

Hab. Chili.

2. CAUPOLICANA FULVICOLLIS.

Caupolicana fulvicollis, *Spin. Faun. Chili.* vi. 216. 2 ♀.

Hab. Chili.

3. CAUPOLICANA HIRSUTA.

Caupolicana hirsuta, *Spin. Faun. Chili.* vi. 216. 3.

Hab. Chili.

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50. PROSOPIS PATELLATA. Page 31.

Prosopis patellata, *Eversm. Bull. Mosc.* xxv. 52. 2.

Hab. Russia.

51. PROSOPIS DISTANS.

Prosopis distans, *Eversm. Bull. Mosc.* xxv. 54. 9 (1852).

Hab. Russia.

52. PROSOPIS LÆVIGATA. B.M.

Female. Length 3½ lines.—Black; head and thorax subopake, very delicately punctured; the head subovate, the face having on each side of the clypeus an angular yellow spot; the anterior margin of the clypeus slightly emarginate. Thorax, the tubercles and an interrupted line on the collar, yellow; the metathorax smooth and rounded; the wings subhyaline and beautifully iridescent; the legs entirely black. Abdomen elongate, sublanceolate, very smooth and shining, having a few black hairs towards the apex.

Hab. New Zealand.

PROSOPIS VARIEGATA.

Prosopis variegata, *Fabr. Syst. Piez.* p. 295. 9.
Eversm. Bull. Mosc. xxv. 51. 1.

Hab. Russia.

PROSOPIS DIFFORMIS.

Prosopis difformis, *H. Schäff. Nom. Entom.* p. 201.
Eversm. Bull. Mosc. xxv. 52. 3.

Hab. Russia.

PROSOPIS SIGNATA.

Sphex signata, *Panz. Faun. Germ.* p. 53. 2.
Prosopis bipunctata, *Eversm. Bull. Mosc.* xxv. 52. 4 (1852).

Hab. Russia.

PROSOPIS LÆVIGATA.

Prosopis lævigata, *H. Schäff. Nom. Ent.* p. 201.
Eversm. Bull. Mosc. xxv. 53. 5 (1852).

Hab. Russia.

PROSOPIS INFLEXA.

Prosopis inflexa, *H. Schäff. Nom. Ent.* p. 201.
Prosopis ciliata, *Eversm. Bull. Mosc.* xxv. 53. 6, and *Mus. Berl. MSS.* (1852).

Hab. Russia.

PROSOPIS ANNULATA.

Apis annulata, *Linn. Faun. Suec.* 1706.
Prosopis annulata, *Eversm. Bull. Mosc.* xxv. 53. 7 (1852).

Hab. Russia.

PROSOPIS ANNULARIS.

Sphex annulata, *Panz. Faun. Germ.* p. 53. 1.
Prosopis annularis, *Eversm. Bull. Mosc.* xxv. 54. 8 (1852).

Hab. Russia.

PROSOPIS PERPLEXA. B.M.

Prosopis confusa, *Smith, Cat. Hym. Ins.* pt. 1. p. 30. 45 (nec confusa, *Nyland.*).

Hab. New Holland.

Genus CHILICOLA.

Chilicola, *Spin. Faun. Chili.* vi. 210.

The superior wings with one marginal and two submarginal cells; the second submarginal cell narrowed towards the marginal; the first recurrent nervure uniting with the first transverse cubital nervure; the second recurrent nervure entering the second submarginal near its apex. The posterior legs have the outer spur serrated within.

1. CHILICOLA RUBRIVENTRIS.

Chilicola rubriventris, *Spin. Faun. Chili.* vi. 211. 1. t. 1. f. 5 ♀.

Hab. Chili.

2. CHILICOLA PLEBEIA.

Chilicola plebeia, *Spin. Faun. Chili.* vi. 211. 2.

Hab. Chili.

3. CHILICOLA LONGITARSA.

Chilicola longitarsa, *Spin. Faun. Chili.* vi. 212. 3.

Hab. Chili.

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18. SPHECODES CHILENSIS. Page 38.

Sphecodes Chilensis, *Spin. Faun. Chili.* vi. 231. 1.

Hab. Chili.

SPHECODES FUSCIPENNIS.

Dichroa fuscipennis, *Germ. Faun. Ins. Europ.* fasc. 5. t. 18.
Eversm. Bull. Mosc. xxv. 48. 1.

Hab. Russia.

SPHECODES RUFESCENS.

Apis rufescens, *Fourc. Ent. Par.* ii. 447. 17.
Dichroa analis, *Eversm. Bull. Mosc.* xxv. 48. 2 (1852).

Hab. Russia.

SPHECODES GIBBUS.

Sphex gibba, *Linn. Syst. Nat.* i. 946. 33 ♀.
Dichroa monilicornis, *Eversm. Bull. Mosc.* xxv. 49. 3 (1852).

Hab. Russia.

SPHECODES GEOFFRELLUS.

Melitta Geoffrella, *Kirby, Mon. Ap. Angl.* ii. 45. 8.
Dichroa Geoffrella, *Eversm. Bull. Mosc.* ii. 49. 4 (1852).

Hab. Russia.

SPHECODES AFRICANUS. B.M.

Sphecodes Africanus, *St. Farg. Hym.* ii. 541. 1.
Lucas, Explo. Sc. Algér. iii. 222. t. 10. f. 9.

Hab. Algeria (Oran).

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116. HALICTUS BRUNNESCENS. Page 73.

Hylæus brunnescens, *Eversm. Bull. Mosc.* xxv. 36. 2 (1852).

Hab. Russia.

117. HALICTUS TOMENTOSUS.

Hylæus tomentosus, *Eversm. Bull. Mosc.* xxv. 37. 5 (1852).

Hab. Russia.

118. HALICTUS SENILIS.

Hylæus senilis, *Eversm. Bull. Mosc.* xxv. 38. 8 (1852).

Hab. Russia.

119. HALICTUS ROSTRATUS.

Hylæus rostratus, *Eversm. Bull. Mosc.* xxv. 38. 9 (1852).

Hab. Russia.

120. HALICTUS FULVICRUS.

Hylæus fulvicrus, *Eversm. Bull. Mosc.* xxv. 39. 12.

Hab. Russia.

121. HALICTUS RUBENS.

Halictus rubellus, *Eversm. Bull. Mosc.* xxv. 40. 15 (nec *Halid.*) (1852).

Hab. Russia.

122. HALICTUS MUCOREUS.

Hylæus mucoreus, *Eversm. Bull. Mosc.* xxv. 44. 25 (1852).

Hab. Russia.

123. Halictus Chiliensis.
Halictus Chiliensis, *Spin. Faun. Chili.* vi. 201. 1.
Hab. Chili.

124. Halictus chloris.
Halictus chloris, *Spin. Faun. Chili.* vi. 202. 2.
Hab. Chili.

125. Halictus nigro-marginatus.
Halictus nigro-marginatus, *Spin. Faun. Chili.* vi. 203. 3.
Hab. Chili.

126. Halictus nigro-cæruleus.
Halictus nigro-cæruleus, *Spin. Faun. Chili.* vi. 204. 4.
Hab. Chili.

127. Halictus proximus.
Halictus proximus, *Spin. Faun. Chili.* vi. 204. 5.
Hab. Chili.

128. Halictus mutabilis.
Halictus mutabilis, *Spin. Faun. Chili.* vi. 205. 6.
Hab. Chili.

129. Halictus emarginatus.
Halictus emarginatus, *Spin. Faun. Chili.* vi. 206. 7.
Hab. Chili.

130. Halictus corinogaster.
Halictus corinogaster, *Spin. Faun. Chili.* vi. 206. 8.
Hab. Chili.

131. Halictus Gayi.
Halictus Gayi, *Spin. Faun. Chili.* vi. 208. 10.
Hab. Chili.

132. Halictus posticus.
Halictus posticus, *Spin. Faun. Chili.* vi. 208. 11.
Hab. Chili.

133. Halictus Gayatinus.

Halictus Gayatinus, *Spin. Faun. Chili.* vi. 209. 12.

Hab. Chili.

Halictus quadricinctus.

Halictus quadricinctus, *Smith, Zool.* vi. 2040. 1.
Hylæus quadricinctus, *Eversm. Bull. Mosc.* xxv. 35. 1 (1852).

Hab. Russia.

Halictus sexcinctus.

Halictus sexcinctus, *Latr. Hist. Nat. Cr. et Ins.* xiii. 366. 2.
Hylæus arbustorum, *Eversm. Bull. Mosc.* xxv. 36. 3 (1852).

Hab. Russia.

Halictus rubicundus.

Apis rubicundus, *Christ. Hym.* p. 190.
Hylæus rubicundus, *Eversm. Bull. Mosc.* xxv. 36. 4 (1852).

Hab. Russia.

Halictus fulvipes.

Halictus fulvipes, *Germ. Faun. Ins. Europ.* fasc. 7. 15.
Hylæus fulvipes, *Eversm. Bull. Mosc.* xxv. 37. 6 (1852).

Hab. Russia.

Halictus interruptus.

Hylæus interruptus, *Panz. Faun. Germ.* 55. 4.
Eversm. Bull. Mosc. xxv. 37. 7 (1852).

Hab. Russia.

Halictus sexnotatus.

Melitta sexnotata, *Kirby, Mon. Ap. Angl.* ii. 82. 37.
Hylæus sexnotatus, *Eversm. Bull. Mosc.* xxv. 38. 10 (1852).

Hab. Russia.

Halictus leucozonius.

Melitta leucozonia, *Kirby, Mon. Ap. Angl.* ii. 76. 33.
Hylæus leucozonius, *Eversm. Bull. Mosc.* xxv. 39. 11.

Hab. Russia.

Halictus lugubris.

Melitta lugubris, *Kirby, Mon. Ap. Angl.* ii. 31. 86 ♂.

Melitta lævigata, *Kirby, Mon. Ap. Angl.* ii. 75. 32 ♀.
Hylæus lævigatus, *Eversm. Bull. Mosc.* xxv. 40. 13.
Hylæus lugubris, *Eversm. Bull. Mosc.* xxv. 40. 14.

Hab. Russia.

HALICTUS ABDOMINALIS.

Hylæus abdominalis, *Panz. Faun. Germ.* 53. 18.
Eversm. Bull. Mosc. xxv. 40. 16 (1852).

Hab. Russia.

HALICTUS ALBIPES.

Hylæus albipes, *Fabr. Ent. Syst.* ii. 306. 13.
Eversm. Bull. Mosc. xxv. 41. 17 (1852).

Hab. Russia.

HALICTUS FULVICORNIS.

Melitta fulvicornis, *Kirby, Mon. Ap. Angl.* ii. 67. 27.
Hylæus fulvicornis, *Eversm. Bull. Mosc.* xxv. 42. 18 (1852).

Hab. Russia.

HALICTUS NITIDIUSCULUS.

Melitta nitidiuscula, *Kirby, Mon. Ap. Angl.* ii. 64. 23.
Hylæus nitidiusculus, *Eversm. Bull. Mosc.* xxv. 42. 19 (1852).

Hab. Russia.

HALICTUS MINUTISSIMUS.

Melitta minutissima, *Kirby, Mon. Ap. Angl.* p. 63. 22.
Hylæus minutissimus, *Eversm. Bull. Mosc.* xxv. 42. 20 (1852).

Hab. Russia.

HALICTUS ÆRATUS.

Melitta ærata, *Kirby, Mon. Ap. Angl.* ii. 58. 17.
Hylæus ærata, *Eversm. Bull. Mosc.* xxv. 43. 21 (1852).

Hab. Russia.

HALICTUS SMEATHMANELLUS.

Melitta Smeathmanella, *Kirby, Mon. Ap. Angl.* ii. *App.* 375. 111.
Hylæus Smeathmanellus, *Eversm. Bull. Mosc.* xxv. 43. 22 (1852).

Hab. Russia.

HALICTUS FLAVIPES.

Melitta flavipes ♂, M. seladonia ♀, *Kirby, Mon. Ap. Angl.* ii. 55. 15, & 57. 16.
Hylæus flavipes et H. seladonia, *Eversm. Bull. Mosc.* xxv. 43. 23, & 44. 24.

Hab. Russia.

HALICTUS MINUTUS.

Halictus minutus, *St. Farg. Hym.* ii. 277. 17?
Spin. Faun. Chili. vi. 207. 9.

Hab. Chili; France?

NOMIA DIFFORMIS. Page 88.

Lasius difformis, *Panz. Faun. Germ.* 89. 15.
Nomia difformis, *Eversm. Bull. Mosc.* xxv. 58. 1 (1852).

Hab. Russia.

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150. ANDRENA FUSCOSA. Page 118.

Andrena fuscosa, *Eversm. Bull. Mosc.* xxv. 11. 1 (1825).

Hab. Russia.

151. ANDRENA COMTA.

Andrena comta, *Eversm. Bull. Mosc.* xxv. 12. 4 (1852).

Hab. Russia.

152. ANDRENA OVINA.

Andrena ovina, *Eversm. Bull. Mosc.* xxv. 12. 6 (1852).

Hab. Russia.

153. ANDRENA CUNICULARIA.

Andrena cunicularia, *Eversm. Bull. Mosc.* xxv. 13. 9 (1852).

Hab. Russia.

154. ANDRENA FULVITARSIS.

Andrena fulvitarsis, *Eversm. Bull. Mosc.* xxv. 14. 12 (1852).

Hab. Russia.

155. Andrena limbata.
Andrena limbata, *Eversm. Bull. Mosc.* xxv. 14. 13 (1852).
Hab. Russia.

156. Andrena aberrans.
Andrena aberrans, *Eversm. Bull. Mosc.* xxv. 15. 14 (1852).
Hab. Russia.

157. Andrena ambigua.
Andrena ambigua, *Eversm. Bull. Mosc.* xxv. 16. 17 (1852).
Hab. Russia.

158. Andrena hirticeps.
Andrena hirticeps, *Eversm. Bull. Mosc.* xxv. 17. 20 (1852).
Hab. Russia.

159. Andrena longula.
Andrena longula, *Eversm. Bull. Mosc.* xxv. 17. 21 (1852).
Hab. Russia.

160. Andrena xanthothorax.
Andrena xanthothorax, *Eversm. Bull. Mosc.* xxv. 18. 24 (1852).
Hab. Russia.

161. Andrena brevitarsis.
Andrena brevitarsis, *Eversm. Bull. Mosc.* xxv. 18. 25 (1852).
Hab. Russia.

162. Andrena fallax.
Andrena fallax, *Eversm. Bull. Mosc.* xxv. 20. 29 (1852).
Hab. Russia.

163. Andrena campestris.
Andrena campestris, *Eversm. Bull. Mosc.* xxv. 20. 31 (1852).
Hab. Russia.

164. Andrena microstigma.
Andrena microstigma, *Eversm. Bull. Mosc.* xxv. 21. 32 (1852).
Hab. Russia.

165. ANDRENA SENILIS.
Andrena senilis, *Eversm. Bull. Mosc.* xxv. 21. 34 (1852).
Hab. Russia.

166. ANDRENA FLORICOLA.
Andrena floricola, *Eversm. Bull. Mosc.* xxv. 22. 35 (1853).
Hab. Russia.

167. ANDRENA LABROSA.
Andrena labrosa, *Eversm. Bull. Mosc.* xxv. 22. 36 (1852).
Hab. Russia.

168. ANDRENA FLORIVAGA.
Andrena florivaga, *Eversm. Bull. Mosc.* xxv. 23. 38 (1852).
Hab. Russia.

169. ANDRENA GRACILIS.
Andrena gracilis, *Eversm. Bull. Mosc.* xxv. 25. 44 (1852).
Hab. Russia.

170. ANDRENA TRICINCTA.
Andrena tricincta, *Eversm. Bull. Mosc.* xxv. 25. 46 (1852).
Hab. Russia.

171. ANDRENA QUADRICINCTA.
Andrena quadricincta, *Eversm. Bull. Mosc.* xxv. 26. 48 (1852).
Hab. Russia.

172. ANDRENA SENEX.
Andrena senex, *Eversm. Bull. Mosc.* xxv. 27. 50 (1852).
Hab. Russia.

173. ANDRENA INCERTA.
Andrena incerta, *Eversm. Bull. Mosc.* xxv. 27. 51 (1852).
Hab. Russia.

174. ANDRENA NIGRIFRONS.
Andrena nigrifrons, *Eversm. Bull. Mosc.* xxv. 27. 52 (1852).
Hab. Russia.

175. Andrena gravida.
Andrena gravida, *Eversm. Bull. Mosc.* xxv. 28. 54 (1852).
Hab. Russia.

176. Andrena scita.
Andrena scita, *Eversm. Bull. Mosc.* xxv. 28. 55 (1852).
Hab. Russia.

177. Andrena strangulata.
Andrena strangulata, *Eversm. Bull. Mosc.* xxv. 29. 57 (1852).
Hab. Russia.

178. Andrena consobrina.
Andrena consobrina, *Eversm. Bull. Mosc.* xxv. 30. 60 (1852).
Hab. Russia.

179. Andrena zonalis.
Andrena zonalis, *Eversm. Bull. Mosc.* xxv. 31. 61 (1852).
Hab. Russia.

180. Andrena rufiventris.
Andrena rufiventris, *Eversm. Bull. Mosc.* xxv. 32. 64 (1852).
Hab. Russia.

Andrena pilipes.
Andrena pilipes, *Fabr. Mant.* p. 298. 13.
Eversm. Bull. Mosc. xxv. 11. 2 (1852).
Hab. Russia.

Andrena funebris.
Andrena funebris, *Panz. Faun. Germ.* p. 64. 5.
Eversm. Bull. Mosc. xxv. 11. 3 (1852).
Hab. Russia.

Andrena cineraria.
Andrena cineraria, *Linn. Syst. Nat.* i. 953. 5.
Eversm. Bull. Mosc. xxv. 12. 5 (1852).
Hab. Russia.

ANDRENA THORACICA.

Andrena thoracica, *Fabr. Syst. Piez.* p. 322. 3.
Eversm. Bull. Mosc. xxv. 13. 7 (1852).

Hab. Russia.

ANDRENA GWYNANA.

Melitta Gwynana, *Kirby, Mon. Ap. Angl.* ii. 120. 60.
Andrena Gwynana, *Eversm. Bull. Mosc.* xxv. 13. 8 (1852).

Hab. Russia.

ANDRENA TRIMMERANA.

Melitta Trimmerana, *Kirby, Mon. Ap. Angl.* ii. 116. 57.
Eversm. Bull. Mosc. xxv. 14. 10.

Hab. Russia.

ANDRENA NIGRO-ÆNEA.

Melitta nigro-ænea, *Kirby, Mon. Ap. Angl.* ii. 109. 54.
Andrena nigro-ænea, *Eversm. Bull. Mosc.* xxv. 14. 11 (1852).

Hab. Russia.

ANDRENA VARIANS.

Apis varians, *Rossi, Mant.* p. 317.
Andrena varians, *Eversm. Bull. Mosc.* xxv. 15. 15 (1852).

Hab. Russia.

ANDRENA FUSCIPES.

Melitta fuscipes, *Kirby, Mon. Ap. Angl.* ii. 136. 75.
Andrena fuscipes, *Eversm. Bull. Mosc.* xxv. 15. 16 (1852).

Hab. Russia.

ANDRENA BARBATULA.

Andrena barbatula, *Eversm. Bull. Mosc.* xxv. 16. 18 (nec *Kirby*), (1852).
Zett. Ins. Lapp. p. 461. 5?

Hab. Russia.

ANDRENA ALBICRUS.

Andrena albicrus, *Smith, Zool.* v. 1924. 59 ♂.
Andrena barbilabrus, *Eversm. Bull. Mosc.* xxv. 16. 19 ♂.

Hab. Russia.

ANDRENA ARMATA.

Andrena armata, *Eversm. Bull. Mosc.* xxv. 17. 22 (1852).
Andrena helvola, *Linn.* ♂? *nec* armata, *Kirby*.

Hab. Russia.

ANDRENA ALBICANS.

Melitta albicans, *Kirby, Mon. Ap. Angl.* ii. 94. 45.
Andrena albicans, *Eversm. Bull. Mosc.* xxv. 18. 23 (1852).

Hab. Russia.

ANDRENA ANALIS.

Andrena analis, *Panz. Faun. Germ.* 90. 14.
Eversm. Bull. Mosc. xxv. 19. 26? (1852).

Hab. Russia.

ANDRENA COITANA.

Melitta Coitana, *Kirby, Mon. Ap. Angl.* ii. 147. 86.
Eversm. Bull. Mosc. xxv. 19. 27.

Hab. Russia.

ANDRENA LABIALIS.

Melitta labialis, *Kirby, Mon. Ap. Angl.* ii. 148. 87.
Andrena labialis, *Eversm. Bull. Mosc.* xxv. 20. 28 (1852).

Hab. Russia.

ANDRENA PILOSULA.

Melitta pilosula, *Kirby, Mon. Ap. Angl.* ii. 164. 104.
Eversm. Bull. Mosc. xxv. 20. 30.

Hab. Russia.

ANDRENA MINUTULA.

Melitta minutula, *Kirby, Mon. Ap. Angl.* ii. 161. 101.
Eversm. Bull. Mosc. xxv. 21. 33 (1852).

Hab. Russia.

ANDRENA DENTICULATA.

Melitta denticulata, *Kirby, Mon. Ap. Angl.* ii. 133. 72.
Andrena denticulata, *Eversm. Bull. Mosc.* xxv. 22. 37 (1852).

Hab. Russia.

ANDRENA COLLINSONANA.

Melitta Collinsonana, *Kirby*, *Mon. Ap. Angl.* ii. 153. 93 ♂.
Melitta proxima, *Kirby*, *Mon. Ap. Angl.* ii. 146. 85 ♀.
Andrena proxima, *Eversm. Bull. Mosc.* xxv. 23. 39 (1852).

Hab. Russia.

ANDRENA INTERRUPTA.

Andrena interrupta, *H. Schäff. Nom. Ent.* p. 66.
Eversm. Bull. Mosc. xxv. 23. 40 (1852).

Hab. Russia.

ANDRENA CINERASCENS.

Andrena cinerascens, *H. Schäff. Nom. Ent.* p. 65.
Eversm. Bull. Mosc. xxv. 24. 41.

Hab. Russia.

ANDRENA CANDENS.

Andrena candens, *H. Schäff. Nom. Ent.* p. 65.
Eversm. Bull. Mosc. xxv. 24. 42 (1852).

Hab. Russia.

ANDRENA INCISA.

Andrena incisa, *H. Schäff. Nom. Ent.* p. 66.
Eversm. Bull. Mosc. xxv. 24. 43 (1852).

Hab. Russia.

ANDRENA LISTERELLA.

Melitta Listerella, *Kirby*, *Mon. Ap. Angl.* ii. 137. 76 ♀.
Andrena Listerella, *Eversm. Bull. Mosc.* xxv. 25. 45 (1852).

Hab. Russia.

ANDRENA FULVICRUS.

Melitta fulvicrus, *Kirby*, *Mon. Ap. Angl.* ii. 138. 77.
Eversm. Bull. Mosc. 25. 47 (1852).

Hab. Russia.

ANDRENA SMITHELLA.

Melitta Smithella, *Kirby*, *Mon. Ap. Angl.* ii. 131. 70.
Andrena Smithella, *Eversm. Bull. Mosc.* xxv. 26. 49.

Hab. Russia.

ANDRENA AFZELIELLA.

Melitta Afzeliella, *Kirby, Mon. Ap. Angl.* ii. 169. 108.
Andrena Afzeliella, *Eversm. Bull. Mosc.* xxv. 27. 53? (1852).

Hab. Russia.

ANDRENA HATTORFIANA.

Andrena Hattorfiana, *Fabr. Syst. Piez.* p. 325. 14.
Eversm. Bull. Mosc. xxv. 28. 56 (1852).

Hab. Russia.

ANDRENA ROSÆ.

Andrena Rosæ, *Fabr. Syst. Piez.* p. 325. 15.
Eversm. Bull. Mosc. xxv. 29. 58 (1852?).

Hab. Russia.

ANDRENA FLOREA.

Andrena florea, *Fabr. Syst. Piez.* p. 324. 12.
Eversm. Bull. Mosc. xxv. 30. 59 (1852).

Hab. Russia.

ANDRENA FULVA.

Apis fulva, *Schrank, Ins. Aust.* p. 400. 805.
Andrena fulva, *Eversm. Bull. Mosc.* xxv. 31. 62 (1852).

Hab. Russia.

ANDRENA CETII.

Apis Cetii, *Schrank, Ins. Aust.* p. 405. 818.
Apis marginata, *Eversm. Bull. Mosc.* xxv. 31. 63 (1852).

Hab. Russia.

MACROPIS LABIATA. Page 125.

Megilla labiata, *Panz. Faun. Germ.* p. 107. 16.
Macropis labiata, *Eversm. Bull. Mosc.* xxvi. 61. 1 (1853).

Hab. Russia.

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8. DASYPODA VILLIPES. Page 125.

Dasypoda villipes, *Eversm. Bull. Mosc.* xxvi. 57. 4 (1853).

Hab. Russia.

9. Dasypoda braccata.

Dasypoda braccata, *Eversm. Bull. Mosc.* xxvi. 57. 5 (1853).

Hab. Russia.

10. Dasypoda nemoralis.

Dasypoda nemoralis, *Bäer, Bull. Mosc.* xxvi. 70. 2. t. 1. f. 2. 2 ♂ ♀ (1853).

Hab. Russia.

11. Dasypoda palleola.

Dasypoda palleola, *Bäer, Bull. Mosc.* xxvi. 70. 3. t. 1. f. 3. 3 ♂ ♀ (1853).

Hab. Russia.

12. Dasypoda Tschertkoviana.

Dasypoda Tschertkoviana, *Bäer, Bull. Mosc.* xxvi. 71. t. 1. f. 5 ♀ (1853).

Hab. Russia.

13. Dasypoda thoracica.

Dasypoda thoracica, *Bäer, Bull. Mosc.* xxvi. 72. t. 1. f. 6 ♀ (1853).

Hab. Russia.

14. Dasypoda melanopleura.

Dasypoda melanopleura, *Bäer, Bull. Mosc.* xxvi. 72. t. 1. f. 7. 7 ♂ ♀ (1853).

Hab. Russia.

15. Dasypoda decora.

Dasypoda decora, *Bäer, Bull. Mosc.* xxvi. 72. t. 1. f. 8. 8 ♂ ♀ (1853).

Hab. Russia.

16. Dasypoda nigricans.

Dasypoda nigricans, *Bäer, Bull. Mosc.* xxvi. 73. t. 1. f. 9. 9 ♂ ♀ (1853).

Hab. Russia.

Dasypoda hirtipes.

Andrena hirtipes, *Fabr. Ent. Syst.* ii. 312. 24.

Dasypoda hirtipes, *Eversm. Bull. Mosc.* xxvi. 55. 1 (1853).
Bäer, Bull. Mosc. xxvi. 69. t. 1. f. 1 ♂ (1853).
Hab. Russia.

DASYPODA PLUMIPES.

Dasypoda plumipes, *Panz. Faun. Germ.* p. 99. 15.
Eversm. Bull. Mosc. xxv. 56. 3 (1852).
Bäer, Bull. Mosc. xxvi. 71. 4. t. 1. f. 4. 4 ♂ ♀ (1853).
Hab. Russia.

DASYPODA ARGENTATA.

Dasypoda argentata, *Panz. Faun. Germ.* p. 107. 15.
Eversm. Bull. Mosc. xxvi. 56. 2 (1853).
Hab. Russia.

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5. PANURGUS LABIATUS. Page 127.

Panurgus labiatus, *Eversm. Bull. Mosc.* xxvi. 62. 2.
Hab. Russia.

6. PANURGUS CLYPEATUS.

Panurgus clypeatus, *Eversm. Bull. Mosc.* xxvi. 62. 3.
Hab. Russia.

PANURGUS CALCARATUS.

Apis calcarata, *Scop. Ent. Carn.* p. 301. 803 ♂.
Panurgus lobatus, *Eversm. Bull. Mosc.* xxvi. 61. 1 (1853).
Hab. Russia.

Genus CAMPTOPÆUM.

Camptopæum, *Spin. Ann. Soc. Ent. Fr.* 2 sér. i. 139.

1. CAMPTOPÆUM GAYI.

Camptopæum Gayi, *Spin. Faun. Chili.* vi. 195. 1.
Hab. Chili.

2. CAMPTOPÆUM NOMADOIDES.

Camptopæum nomadoides, *Spin. Faun. Chili.* vi. 196. 2.
Hab. Chili.

3. CAMPTOPÆUM MACULATUM.

Camptopæum maculatum, *Spin. Faun. Chili.* vi. 197. 3.
Hab. Chili.

4. Camptopæum trifasciatum.

Camptopæum trifasciatum, *Spin. Faun. Chili.* vi. 197. 4.
Hab. Chili.

5. Camptopæum submetallicum.

Camptopæum submetallicum, *Spin. Faun. Chili.* vi. 198. 5.
Hab. Chili.

6. Camptopæum hirsutulum.

Camptopæum hirsutulum, *Spin. Faun. Chili.* vi. 199. 6.
Hab. Chili.

7. Camptopæum nigrum.

Camptopæum nigrum, *Spin. Faun. Chili.* vi. 199. 7.
Hab. Chili.

8. Camptopæum varipes.

Camptopæum varipes, *Spin. Faun. Chili.* vi. 200. 8.
Hab. Chili.

Systropha curvicornis. Page 131.

Eucera curvicornis, *Scop. Ann. Hist. Nat.* iv. 9.
Systropha spiralis, *Eversm. Bull. Mosc.* xxv. 59. 1 (1852).
Hab. Russia.

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6. Rophites cana. Page 132.

Rophites cana, *Eversm. Bull. Mosc.* xxv. 60. 2 (1852).
Hab. Russia.

7. Rophites bispinosa.

Rophites bispinosa, *Eversm. Bull. Mosc.* xxv. 60. 3 (1852).
Hab. Russia.

Rophites quinquespinosa.

Rophites 5-spinosa, *Spin. Ins. Lig.* fasc. 2. 72. 5.
Eversm. Bull. Mosc. xxv. 60. 1 (1852).
Hab. Russia.

152. MEGACHILE MONOCEROS. Page 194.
Megachile monoceros, *Eversm. Bull. Mosc.* xxv. 64. 1 (1852).
Hab. Russia.

153. MEGACHILE MAXILLOSA.
Megachile maxillosa, *Eversm. Bull. Mosc.* xxv. 68. 2 (1852).
Hab. Russia.

154. MEGACHILE OBSCURA.
Megachile obscura, *Eversm. Bull. Mosc.* xxv. 71. 7 (1852).
Hab. Russia.

155. MEGACHILE ALBICILLA.
Megachile albicilla, *Eversm. Bull. Mosc.* xxv. 71. 8 (1852).
Hab. Russia.

156. MEGACHILE FULVIMANA.
Megachile fulvimana, *Eversm. Bull. Mosc.* xxv. 71. 9 (1852).
Hab. Russia.

157. MEGACHILE MELANOGASTER.
Megachile melanogaster, *Eversm. Bull. Mosc.* xxv. 73. 12 (1852).
Hab. Russia.

158. MEGACHILE MELATRONICHA.
Megachile melatronicha, *Spin. Faun. Chili.* vi. 179. 3.
Hab. Chili.

159. MEGACHILE CHILENSIS.
Megachile Chilensis, *Spin. Faun. Chili.* vi. 178. 1.
Hab. Chili.

MEGACHILE LAGOPODA.
Apis lagopoda, *Linn. Faun. Suec.* 1702.
Megachile lagopoda, *Eversm. Bull. Mosc.* xxv. 68. 3 (1852).
Hab. Russia.

MEGACHILE WILLUGHBIELLA.
Apis Willughbiella, *Kirby, Mon. Ap. Angl.* ii. 233. 41.
Megachile Willughbiella, *Eversm. Bull. Mosc.* xxv. 69. 4 (1852).
Hab. Russia.

MEGACHILE CENTUNCULARIS.

Apis centuncularis, *Linn. Faun. Suec.* 1687.
Megachile centuncularis, *Eversm. Bull. Mosc.* xxv. 70. 5 (1852).
Hab. Russia.

MEGACHILE CIRCUMCINCTA.

Apis circumcincta, *Kirby, Mon. Ap. Angl.* ii. 246. 45.
Megachile circumcincta, *Eversm. Bull. Mosc.* xxv. 70. 6 (1852).
Hab. Russia.

MEGACHILE ARGENTATA.

Apis argentata, *Fabr. Ent. Syst.* ii. 336. 96.
Megachile albiventris, *Eversm. Bull. Mosc.* xxv. 72. 10, nec *Panz.* (1852).
Hab. Russia.

MEGACHILE PACIFICA.

Apis pacifica, *Panz. Faun. Germ.* p. 55. 16.
Megachile pacifica, *Eversm. Bull. Mosc.* xxv. 72. 11 (1852).
Hab. Russia.

MEGACHILE POLLINOSA.

Megachile pollinosa, *Spin. Faun. Chili.* vi. 178. 2.
Hab. Chili.

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54. OSMIA FULVA. Page 143.

Osmia fulva, *Eversm. Bull. Mosc.* xxv. 63. 1 (1852).
Hab. Russia.

55. OSMIA SCITA.

Osmia scita, *Eversm. Bull. Mosc.* xxv. 63. 2 (1852).
Hab. Russia.

56. OSMIA HAMATA.

Osmia hamata, *Eversm. Bull. Mosc.* xxv. 64. 5 (1852).
Hab. Russia.

OSMIA RUFA.

Apis rufa, *Linn. Faun. Suec.* no. 1690 ♂.
Osmia bicornis, *Eversm. Bull. Mosc.* xxv. 63. 3 ♂ ♀ (1852).
Hab. Russia.

Osmia serratulæ.

Trachusa serratulæ, *Panz. Faun. Germ.* p. 86. 15.
Osmia serratulæ, *Eversm. Bull. Mosc.* xxv. 64. 4 (1852).

Hab. Russia.

Osmia leucomelana.

Apis leucomelana, *Kirby*, *Mon. Ap. Angl.* ii. 260. 52.
Eversm. Bull. Mosc. xxv. 64. 6 (1852).

Hab. Russia.

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107. Anthidium lunatum. Page 217. B.M.

Female. Length 4 lines.—Black; the head and thorax strongly punctured, the punctures confluent on the disk of the thorax; the extreme base of the scape and the third joint of the flagellum ferruginous beneath. The thorax on the sides and beneath covered with large distinct punctures; the superior wings have a dark fuscous stain along their anterior margins; the scutellum bright yellow; the apical joints of the tarsi ferruginous; the anterior and intermediate tarsi clothed exteriorly with bright golden pubescence, that on the tarsi beneath ferruginous. Abdomen shining, finely punctured at the base, and gradually more strongly so to the apex, which is very coarsely punctured; the first and second segments have on each side a short yellow line, the third and fourth segments have in the middle a transverse narrow yellow fascia, the fifth and sixth segments are yellow, their apical margins only being very narrowly black; the ventral scopa golden-yellow.

Hab. Brazil (Alta de Chäa on the Tapajos). (Coll. H. W. Bates.)

ADDENDA ET CORRIGENDA.

Page 8, line 25. *For* antennæ *read* ocelli.

Page 19. Prosopis annulata, *Fabr.* (communis, *Nyland.*).
Prosopis dilatata, *Nyland. Ap. Boreal.* p. 188 (nec *Kirby*).

Page 48. Halictus flavipes, *Fabr.*, *Nylander*, *Revis.* (ver.).
Halictus seladonius, *Ap. Boreal.* p. 203. 8 (nec *Fabr. Rev.*).

Page 104. Andrena analis, *Panz.* (nec *Fabr.*).
Andrena tarsata, *Nyland. Revis. Ap. Boreal.* p. 259.

Page 133. *After* line 17, *add* Subfam. 2. DASYGASTRÆ, *Latr.*

Page 138. Osmia serratulæ, *Panz.*
Trachusa serratulæ, *Nyland.*

EXPLANATION OF THE PLATES.

PLATE VII.

The letters indicate the same parts in all the figures; they are as follows:—*a*. the mentum; *b*. the labium; *c*. the labial palpi; *d*. the paraglossæ; *e*. the maxilla; *f*. the lobe of the maxilla; *g*. the maxillary palpus.

Fig.
1. *Anthidium Africanum.*
2. *Serapis denticulatus.*
3. *Osiris pallidus.*
4. *Exoneura bicolor.*
5. *Allodape pictifrons.*
6. *Habropoda ezonata.*

6 *a*. Posterior tibia and tarsus of *Habropoda ezonata.*

Fig.
7. Posterior tibia and tarsus of *Habropoda zonatula.*
8. *Xenoglossa fulva.*
9. *Exomalopsis fulvo-pilosa.*
10. *Tetrapedia diversipes.*

PLATE VIII.

1. *Chrysantheda frontalis.*
2. *Leiopodus lacertus.*
3. *Ancylosceles ursinus.*
4. *Centris dentata.*
5. *Epicharis bicolor.*
6. *Euglossa Romandii.*
7. *Euglossa pulchra.*

PLATE IX.

1. Tongue of *Serapis.*
2. Maxilla of *Serapis.*
3. Wing of *Serapis.*
4. Mandible of *Serapis.*
5. Labrum of *Serapis.*
6. Tongue of *Allodape.*
7. Maxilla of *Allodape.*
8. Wing of *Allodape.*
9. Tongue of *Exoneura.*
10. Maxilla of *Exoneura.*
11. Posterior leg of *Exoneura.*
12. Claw of *Exoneura.*
13. Wing of *Exoneura.*
14. Tongue of *Leiopodus.*
15. Maxilla of *Leiopodus.*
16. Wing of *Leiopodus.*
17. Tongue of *Crocisa.*
18. Maxilla of *Crocisa.*
19. Wing of *Crocisa.*

PLATE X.

Fig.
1. Tongue of *Liogastra*.
2. Maxilla of *Liogastra*.
3. Wing of *Liogastra*.
4. Tongue of *Euritis*.
5. Maxilla of *Euritis*.
6. Calcar or spur of the posterior tibiæ of *Euritis*.
7. Labrum of *Euritis*.
8. Wing of *Euritis*.
9. Tongue of *Melissa*.
10. Maxilla of *Melissa*.
11. Spur of the intermediate tibiæ.
12. Wing of *Melissa*.
13. Tongue of *Mesocheira*.
14. Maxilla of *Mesocheira*.
15. Spur of intermediate tibiæ.
16. Wing of *Mesocheira*.
17. Wing of *Acanthopus*.

PLATE XI.

1. Tongue of *Thalestria*.
2. Maxilla of *Thalestria*.
3. Wing of *Thalestria*.
4. Labrum of *Thalestria*.
5. Tongue of *Ctenioschelus*.
6. Maxilla of *Ctenioschelus*.
7. Maxillary palpus of *Ctenioschelus*.
8. Antennæ of *Ctenioschelus*.
9. Wing of *Ctenioschelus*.
10. Spur of intermediate tibiæ of *Ctenioschelus*.
11. Tongue of *Aglae*.
12. Maxilla of *Aglae*.
13. Wing of *Aglae*.
14. Wing of *Melecta*.
15. Wing of *Crocisa*.
16. Wing of *Phileremus*.
17. Wing of *Ammobates*.
18. Wing of *Pasites*.

PLATE XII.

1. Tongue of *Osiris*.
2. Wing of *Osiris*.
3. Labrum of *Osiris*.
4. Apex of the abdomen of *Osiris*, anal valve and aculeus.
5. Maxilla of *Osiris*.
6. Antennæ of *Osiris*.
7. Maxilla of *Xenoglossa*.
8. Wing of *Xenoglossa*.
9. Maxilla of *Habropoda*.
10. Tongue of *Habropoda*.
11. Wing of *Habropoda*.
12. Tongue of *Lestis*.
13. Maxilla of *Lestis*.
14. Antenna of *Lestis*.
15. Wing of *Lestis*.
16. Tongue of *Dioxys*.
17. Labrum of *Dioxys*.
18. Wing of *Dioxys*.
19. Mandible of *Dioxys*.
20. Maxilla of *Epicharis*.
21. Wing of *Epicharis*.

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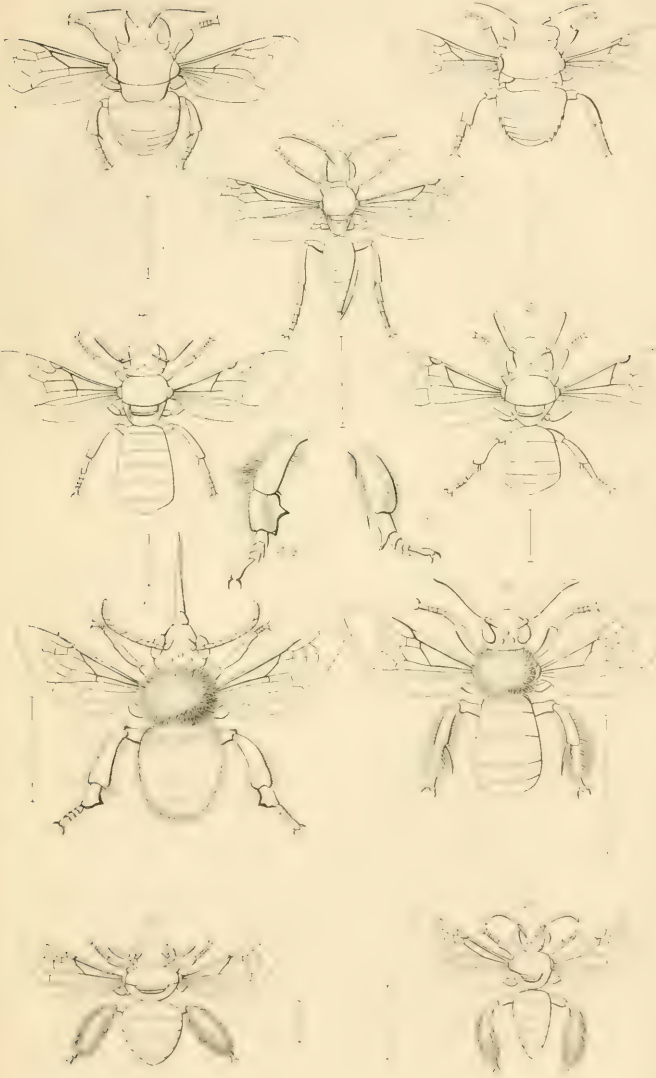

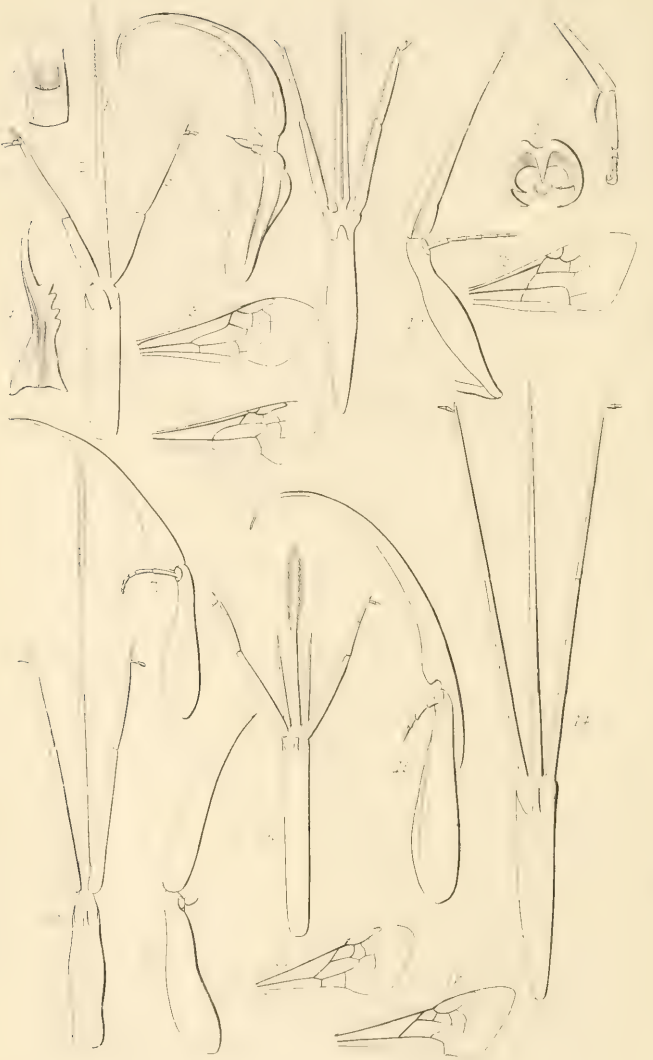

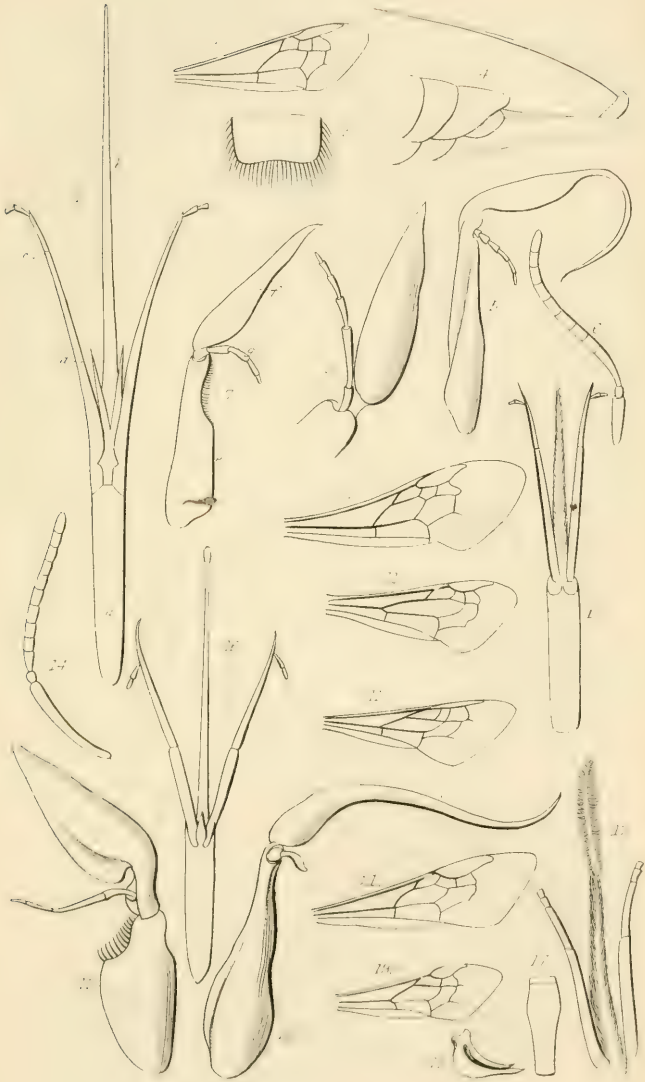

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